

Appendix E. HAZUS Database Dictionary

This database dictionary provides information for each inventory database in two ways:

- Database Information table.
- Field Information table.

The Database Information and Field Information tables are provided for each inventory database. The tables are given exactly in the order shown above.

Database Information:

- File: name of the database.
- Location1: initial location of the database. It could be either the subdirectory DATA, or (SRDIR) meaning the study region subdirectory as specified by the user. All directories are relative to the main directory (default is \HAZUS).
- Location2: usually if the database is a template database, then it is copied to a different directory at some time during the life of the program. "Location2" is the final location for the file.
- Mappable: Yes if the database has geographic information tied to it.
- Editable: Yes if the user can edit the data.
- # Fields: number of fields in the database. This is constant across the life of the file.
- # Records1: the number of original records when the database is in "Location1".
- # Records2: the number of records when the database is in "Location2".

Field Information:

For any given database, the plus symbol (+) indicates the minimum fields required by HAZUS for a record to be added into the database and thus used in the analyses.

For any given database, the triangle symbol (▲) indicates all the fields that will be populated by the software -using default values- if no data was supplied by the user and thus used in the analyses.

A star symbol (*) at the end of the description column indicates that an important comment relative to that particular field is noted at right after Filed Information table.

Table key fields are shown in ***bold italic*** font. These fields are upon which the .dbf tables are indexed. All indices are ascending order. The index tag is named using the filed name. The index file has the .mdx extension and uses the Dbase IV format. If a compound key is used, a description is given.

The databases are listed according to their type, which could be any of the following:

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Database Type	Description	Naming convention	Location/Path:
Internal	Used internally by the program (HAZUS).	Anything.	DATA subdirectory. Initial subdirectory could be TEMPLATE
Inventory	Data storing all the inventory information..	Follows chapter numbering convention as listed in the technical manual.	Study region subdirectory if editable. DATA subdirectory if not (for example, the classification databases are not currently editable). Initial subdirectory could be TEMPLATE

E.1 Inventory Databases

E.1.1 General Building Stock

E.1.1.1 Square Footage

The square footage files for all the US census tract by occupancy type are provided by the software as part of the default inventory and could be modified by the user if necessary.

File:	SOSQFT.DBF
Mappable:	No

Name	Type	Length	Description
TRACT	C	11	Census Tract
RES1▲	N	10,1	Building Area (SQFT) in Res1*
RES2▲	N	10,1	Building Area (SQFT) in Res2*
RES3▲	N	10,1	Building Area (SQFT) in Res3*
RES4▲	N	10,1	Building Area (SQFT) in Res4*
RES5▲	N	10,1	Building Area (SQFT) in Res5*
RES6▲	N	10,1	Building Area (SQFT) in Res6*
COM1▲	N	10,1	Building Area (SQFT) in Com1*
COM2▲	N	10,1	Building Area (SQFT) in Com2*
COM3▲	N	10,1	Building Area (SQFT) in Com3*
COM4▲	N	10,1	Building Area (SQFT) in Com4*
COM5▲	N	10,1	Building Area (SQFT) in Com5*
COM6▲	N	10,1	Building Area (SQFT) in Com6*
COM7▲	N	10,1	Building Area (SQFT) in Com7*
COM8▲	N	10,1	Building Area (SQFT) in Com8*
COM9▲	N	10,1	Building Area (SQFT) in Com9*
COM10	N	10,1	Building Area (SQFT) in Com10*
IND1▲	N	10,1	Building Area (SQFT) in Ind1*
IND2▲	N	10,1	Building Area (SQFT) in Ind2*
IND3▲	N	10,1	Building Area (SQFT) in Ind3*
IND4▲	N	10,1	Building Area (SQFT) in Ind4*
IND5▲	N	10,1	Building Area (SQFT) in Ind5*
IND6▲	N	10,1	Building Area (SQFT) in Ind6*
AGR1▲	N	10,1	Building Area (SQFT) in Agr1*
REL1▲	N	10,1	Building Area (SQFT) in Rel1*
GOV1▲	N	10,1	Building Area (SQFT) in Gov1*
GOV2▲	N	10,1	Building Area (SQFT) in Gov2*
EDU1▲	N	10,1	Building Area (SQFT) in Edu1*
EDU2▲	N	10,1	Building Area (SQFT) in Edu2*
TOTAL	N	10,1	Total Building Area (SQFT) per Census Tract

* Note: Refer to Table A.3 of Appendix for more detailed descriptions of the occupancy types.

E.1.1.2 Building Count

◆ Number of Buildings per Specific Occupancy

File:	BLDCNTSO.DBF
Mappable:	No

Name	Type	Length	Description
TRACT ▲	C	11	Census Tract
RES1▲	N	20,0	Building Count in Res1*
RES2▲	N	20,0	Building Count in Res2*
RES3▲	N	20,0	Building Count in Res3*
RES4▲	N	20,0	Building Count in Res4*
RES5▲	N	20,0	Building Count in Res5*
RES6▲	N	20,0	Building Count in Res6*
COM1▲	N	20,0	Building Count in Com1*
COM2▲	N	20,0	Building Count in Com2*
COM3▲	N	20,0	Building Count in Com3*
COM4▲	N	20,0	Building Count in Com4*
COM5▲	N	20,0	Building Count in Com5*
COM6▲	N	20,0	Building Count in Com6*
COM7▲	N	20,0	Building Count in Com7*
COM8▲	N	20,0	Building Count in Com8*
COM9▲	N	20,0	Building Count in Com9*
COM10 ▲	N	20,0	Building Count in Com10*
IND1▲	N	20,0	Building Count in Ind1*
IND2▲	N	20,0	Building Count in Ind2*
IND3▲	N	20,0	Building Count in Ind3*
IND4▲	N	20,0	Building Count in Ind4*
IND5▲	N	20,0	Building Count in Ind5*
IND6▲	N	20,0	Building Count in Ind6*
AGR1▲	N	20,0	Building Count in Agr1*
REL1▲	N	20,0	Building Count in Rel1*
GOV1▲	N	20,0	Building Count in Gov1*
GOV2▲	N	20,0	Building Count in Gov2*
EDU1▲	N	20,0	Building Count in Edu1*
EDU2▲	N	20,0	Building Count in Edu2*
TOTAL ▲	N	20,0	Total Building Count per Census Tract

* Note: Refer to Table A.3 of Appendix for more detailed descriptions of the occupancy types.

◆ **Number of Buildings per General Occupancy**

File:	BLDCNTGO.DBF
Mappable:	No

Name	Type	Length	Description
TRACT ▲	C	11	Census Tract
RES▲	N	20,0	Total Residential Building Count
COM▲	N	20,0	Total Commercial Building Count
IND▲	N	20,0	Total Industrial Building Count
AGR▲	N	20,0	Total Agricultural Building Count
REL▲	N	20,0	Total Religious Institutions Building Count
GOV▲	N	20,0	Total Governmental Building Count
EDU▲	N	20,0	Total Educational Building Count
TOTAL ▲	N	20,0	Total Building Count per Census Tract

◆ **Number of Buildings by Building Type per Specific Occupancy**

File:	BIDCNTMB.DBF
Mappable:	No

Name	Type	Length	Description
TRACT	C	11	Census Tract
W1▲	N	20,0	Building Count in W1*
W2▲	N	20,0	Building Count in W2*
S1L▲	N	20,0	Building Count in S1L*
S1M▲	N	20,0	Building Count in S1M*
S1H▲	N	20,0	Building Count in S1H*
S2L▲	N	20,0	Building Count in S2L*
S2M▲	N	20,0	Building Count in S2M*
S2H▲	N	20,0	Building Count in S2H*
S3▲	N	20,0	Building Count in S3*
S4L▲	N	20,0	Building Count in S4L*
S4M▲	N	20,0	Building Count in S4M*
S4H▲	N	20,0	Building Count in S4H*
S5L▲	N	20,0	Building Count in S5L*
S5M▲	N	20,0	Building Count in S5M*
S5H▲	N	20,0	Building Count in S5H*
C1L▲	N	20,0	Building Count in C1L*
C1M▲	N	20,0	Building Count in C1M*
C1H▲	N	20,0	Building Count in C1H*
C2L▲	N	20,0	Building Count in C2L*
C2M▲	N	20,0	Building Count in C2M*
C2H▲	N	20,0	Building Count in C2H*
C3L▲	N	20,0	Building Count in C3L*
C3M▲	N	20,0	Building Count in C3M*
C3H▲	N	20,0	Building Count in C3H*
PC1▲	N	20,0	Building Count in PC1*
PC2L▲	N	20,0	Building Count in PC2L*
PC2M▲	N	20,0	Building Count in PC2M*
PC2H▲	N	20,0	Building Count in PC2H*
RM1L▲	N	20,0	Building Count in RM1L*
RM1M▲	N	20,0	Building Count in RM1M*
RM2L▲	N	20,0	Building Count in RM2L*
RM2M▲	N	20,0	Building Count in CM2M*
RM2H▲	N	20,0	Building Count in CM2H*
URML▲	N	20,0	Building Count in URML*
URMM▲	N	20,0	Building Count in URMM*
MH▲	N	20,0	Building Count in MH*
TOTAL	N	20,0	Total Building Count per Census Tract*

* Note: Refer to Table A.2 of Appendix for more detailed descriptions of the occupancy types.

◆ **Number of Buildings by Building Type per General Occupancy**

File:	BLDCNTGB.DBF
Mappable:	No

Name	Type	Length	Description
TRACT▲	C	11	Census Tract
WOOD▲	N	20,0	Total Wood Building Count
STEEL▲	N	20,0	Total Steel Building Count
CONCRETE▲	N	20,0	Total Concrete Building Count
PRECAST▲	N	20,0	Total Precast Building Count
RMASONRY▲	N	20,0	Total Reinforced Masonry Building Count
URMASONRY ▲	N	20,0	Total Unreinforced Masonry Building Count
MOBILE▲	N	20,0	Total Mobil Homes Building Count
TOTAL▲	N	20,0	Total Building Count per Census Tract*

E.1.1.3 Occupancy Mapping Inventory

◆ Specific Occupancy to Building Type Mapping

File: dflt.** where * = lgb, mgb, hgb (1 for each design level for GBS Module)
 * = lef, mef, hef (1 for each design level for essential facility module)

Mappable: No

Name	Type	Length	Description
NO+	N	2,0	Sequence #. Could be > 28 in future versions.
OCCUP+	C	5	Specific occupancy label
TOTAL+	N	3,0	Sum % for all Building type for given occupancy
W1+	N	3,0	% of building stock of model building type W1 for given occupancy
W2+	N	3,0	% of building stock of model building type W2 for given occupancy
S1L+	N	3,0	% of building stock of model building type S1L for given occupancy
S1M+	N	3,0	% of building stock of model building type S1M for given occupancy
S1H+	N	3,0	% of building stock of model building type S1H for given occupancy
S2L+	N	3,0	% of building stock of model building type S2L for given occupancy
S2M+	N	3,0	% of building stock of model building type S2M for given occupancy
S2H+	N	3,0	% of building stock of model building type S2H for given occupancy
S3+	N	3,0	% of building stock of model building type S3 for given occupancy
S4L+	N	3,0	% of building stock of model building type S4L for given occupancy
S4M+	N	3,0	% of building stock of model building type S4M for given occupancy
S4H+	N	3,0	% of building stock of model building type S4H for given occupancy
S5L+	N	3,0	% of building stock of model building type S5L for given occupancy
S5M+	N	3,0	% of building stock of model building type S5M for given occupancy
S5H+	N	3,0	% of building stock of model building type S5H for given occupancy
C1L+	N	3,0	% of building stock of model building type C1L for given occupancy
C1M+	N	3,0	% of building stock of model building type C1M for given occupancy
C1H+	N	3,0	% of building stock of model building type C1H for given occupancy
C2L+	N	3,0	% of building stock of model building type C2L for given occupancy
C2M+	N	3,0	% of building stock of model building type C2M for given occupancy
C2H+	N	3,0	% of building stock of model building type C2H for given occupancy
C3L+	N	3,0	% of building stock of model building type C3L for given occupancy
C3M+	N	3,0	% of building stock of model building type C3M for given occupancy
C3H+	N	3,0	% of building stock of model building type C3H for given occupancy
PC1+	N	3,0	% of building stock of model building type PC1 for given occupancy
PC2L+	N	3,0	% of building stock of model building type PC2L for given occupancy
PC2M+	N	3,0	% of building stock of model building type PC2M for given occupancy
PC2H+	N	3,0	% of building stock of model building type PC2H for given occupancy
RM1L+	N	3,0	% of building stock of model building type RM1L for given occupancy
RM1M+	N	3,0	% of building stock of model building type RM1M for given occupancy
RM2L+	N	3,0	% of building stock of model building type RM2L for given occupancy
RM2M+	N	3,0	% of building stock of model building type RM2M for given occupancy
RM2H+	N	3,0	% of building stock of model building type RM2H for given occupancy
URML+	N	3,0	% of building stock of model building type URML for given occupancy
URMM+	N	3,0	% of building stock of model building type URMM for given occupancy
MH+	N	3,0	% of building stock of model building type MH for given occupancy

◆ **Occupancy Scheme to Census Tract Mapping Scheme**

File:	SOCTMAP.DBF
Mappable:	No

Name	Type	Length	Description
TRACT	C	11	11-digit census tract number
MAP_SCHEME	C	12	12-char filename of previously defined mapping scheme ⁴ *

⁴ All the mapping scheme files are stored in the study region folder

E.1.1.4 Dollar Exposure

♦ Dollar Exposure per Specific Occupancy:

File:	SOEXP.DBF
Mappable:	No

Name	Type	Length	Description
TRACT ▲	C	11	Census Tract
RES1▲	N	20,0	Dollar Exposure in Res1*
RES2▲	N	20,0	Dollar Exposure in Res2*
RES3▲	N	20,0	Dollar Exposure in Res3*
RES4▲	N	20,0	Dollar Exposure in Res4*
RES5▲	N	20,0	Dollar Exposure in Res5*
RES6▲	N	20,0	Dollar Exposure in Res6*
COM1▲	N	20,0	Dollar Exposure in Com1*
COM2▲	N	20,0	Dollar Exposure in Com2*
COM3▲	N	20,0	Dollar Exposure in Com3*
COM4▲	N	20,0	Dollar Exposure in Com4*
COM5▲	N	20,0	Dollar Exposure in Com5*
COM6▲	N	20,0	Dollar Exposure in Com6*
COM7▲	N	20,0	Dollar Exposure in Com7*
COM8▲	N	20,0	Dollar Exposure in Com8*
COM9▲	N	20,0	Dollar Exposure in Com9*
COM10 ▲	N	20,0	Dollar Exposure in Com10*
IND1▲	N	20,0	Dollar Exposure in Ind1*
IND2▲	N	20,0	Dollar Exposure in Ind2*
IND3▲	N	20,0	Dollar Exposure in Ind3*
IND4▲	N	20,0	Dollar Exposure in Ind4*
IND5▲	N	20,0	Dollar Exposure in Ind5*
IND6▲	N	20,0	Dollar Exposure in Ind6*
AGR1▲	N	20,0	Dollar Exposure in Agr1*
REL1▲	N	20,0	Dollar Exposure in Rel1*
GOV1▲	N	20,0	Dollar Exposure in Gov1*
GOV2▲	N	20,0	Dollar Exposure in Gov2*
EDU1▲	N	20,0	Dollar Exposure in Edu1*
EDU2▲	N	20,0	Dollar Exposure in Edu2*
TOTAL ▲	N	20,0	Total Dollar Exposure per Census Tract

Note: Refer to Table A.3 of Appendix for more detailed descriptions of the occupancy types.

♦ **Dollar Exposure per General Occupancy**

File:	GOEXP.DBF
Mappable:	No

Name	Type	Length	Description
TRACT ▲	C	11	Census Tract
RES▲	N	20,0	Total Residential Dollar Exposure
COM▲	N	20,0	Total Commercial Dollar Exposure
IND▲	N	20,0	Total Industrial Dollar Exposure
AGR▲	N	20,0	Total Agricultural Dollar Exposure
REL▲	N	20,0	Total Religious Institutions Dollar Exposure
GOV▲	N	20,0	Total Governmental Dollar Exposure
EDU▲	N	20,0	Total Educational Dollar Exposure
TOTAL ▲	N	20,0	Total Dollar Exposure per Census Tract

◆ **Dollar Exposure by Building Type per Specific Occupancy**

File:	SBTEXP.DBF
Mappable:	No

Name	Type	Length	Description
TRACT	C	11	Census Tract
W1▲	N	20,0	Dollar Exposure for W1*
W2▲	N	20,0	Dollar Exposure for W2*
S1L▲	N	20,0	Dollar Exposure for S1L*
S1M▲	N	20,0	Dollar Exposure for S1M*
S1H▲	N	20,0	Dollar Exposure for S1H*
S2L▲	N	20,0	Dollar Exposure for S2L*
S2M▲	N	20,0	Dollar Exposure for S2M*
S2H▲	N	20,0	Dollar Exposure for S2H*
S3▲	N	20,0	Dollar Exposure for S3*
S4L▲	N	20,0	Dollar Exposure for S4L*
S4M▲	N	20,0	Dollar Exposure for S4M*
S4H▲	N	20,0	Dollar Exposure for S4H*
S5L▲	N	20,0	Dollar Exposure for S5L*
S5M▲	N	20,0	Dollar Exposure for S5M*
S5H▲	N	20,0	Dollar Exposure for S5H*
C1L▲	N	20,0	Dollar Exposure for C1L*
C1M▲	N	20,0	Dollar Exposure for C1M*
C1H▲	N	20,0	Dollar Exposure for C1H*
C2L▲	N	20,0	Dollar Exposure for C2L*
C2M▲	N	20,0	Dollar Exposure for C2M*
C2H▲	N	20,0	Dollar Exposure for C2H*
C3L▲	N	20,0	Dollar Exposure for C3L*
C3M▲	N	20,0	Dollar Exposure for C3M*
C3H▲	N	20,0	Dollar Exposure for C3H*
PC1▲	N	20,0	Dollar Exposure for PC1*
PC2L▲	N	20,0	Dollar Exposure for PC2L*
PC2M▲	N	20,0	Dollar Exposure for PC2M*
PC2H▲	N	20,0	Dollar Exposure for PC2H*
RM1L▲	N	20,0	Dollar Exposure for RM1L*
RM1M▲	N	20,0	Dollar Exposure for RM1M*
RM2L▲	N	20,0	Dollar Exposure for RM2L*
RM2M▲	N	20,0	Dollar Exposure for CM2M*
RM2H▲	N	20,0	Dollar Exposure for CM2H*
URML▲	N	20,0	Dollar Exposure for URML*
URMM▲	N	20,0	Dollar Exposure for URMM*
MH▲	N	20,0	Dollar Exposure for MH*
TOTAL	N	20,0	Total Dollar Exposure per Census Tract*

Note: Refer to Table A.2 of Appendix for more detailed descriptions of the occupancy types.

♦ **Dollar Exposure by Building Type per General Occupancy**

File:	GBTEXP.DBF
Mappable:	No

Name	Type	Length	Description
TRACT▲	C	11	Census Tract
WOOD▲	N	20,0	Total Dollar Exposure for Wood Buildings
STEEL▲	N	20,0	Total Dollar Exposure for Steel Buildings
CONCRETE▲	N	20,0	Total Dollar Exposure for Concrete Buildings
PRECAST▲	N	20,0	Total Dollar Exposure for Precast Buildings
RMASONRY▲	N	20,0	Total Dollar Exposure for Reinforced Buildings
URMASONRY ▲	N	20,0	Total Dollar Exposure for Unreinforced Buildings
MOBILE▲	N	20,0	Total Dollar Exposure for Mobil Homes
TOTAL▲	N	20,0	Total Dollar Exposure per Census Tract*

E.1.2 Essential Facilities Inventory

E.1.2.1 Medical Care Facilities

File:	EFCARE.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Occupancy Class
MAPPING▲	C	30	Mapping Scheme ⁵
BLDG_TYPE	C	4	Model Building Type ⁶
DESIGNLVL▲	C	1	Seismic Design Level:
BIAS▲	C	1	Construction Quality Flag:
FOUNDATION	N	1,0	Foundation Type
YEAR_B	N	4,0	Year Built
COST▲	N	10,0	Replacement Cost (thous. \$)
BU_PWR	C	1	Back-up Power: Y = Yes
FUNCTION	C	10	Primary Function
NUM_BEDS	N	4,0	Number of Beds
AHA_ID	C	7	AHA ID Number
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

⁵ The user does not have to specify both the “MAPPING” and the “BLDG_TYPE” fields. Only one is required (the mapping is assigned the “DEFAULT” mapping scheme by default). If both fields were assigned, the software will use the BLDG_TYPE field.

⁶ See footnote above.

E.1.2.2 Emergency Response Facilities

File:	EFEMERG.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Occupancy Class
MAPPING▲	C	30	Mapping Scheme*
BLDG_TYPE▲	C	4	Model Building Type ⁷
DESIGNLVL▲	C	1	Seismic Design Level:
BIAS▲	C	1	Construction Quality Flag:
FOUNDATION	N	1,0	Foundation Type
YEAR_B	N	4,0	Year Built
COST▲	N	10,0	Replacement Cost (thous. \$)
BU_PWR	C	1	Back-up Power: Y = Yes
STORIES	N	2,0	Number of Stories
NUM_TRUCKS	N	2,0	Number of Fire Trucks ⁸
AREA	N	6,0	Facility Area (sq.ft)
CAPACITY	N	6,0	Facility Sleeping Capacity
KITCHEN	C	1	Kitchen Available: Y = Yes
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

⁷ The user does not have to specify both the “MAPPING” and the “BLDG_TYPE” fields. Only one is required (the mapping is assigned the “DEFAULT” mapping scheme by default).

⁸ Since Essential Facilities databases consists of Fire Station, Police Stations and Emergency Operating Centers, this field only gets occupied in the Fire Station database and stays empty in Police Stations and Emergency Operating Centers databases

E.1.2.3 Schools

File:	EFSCHOOL.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
DISTRICT	C	30	School District
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Occupancy Class
MAPPING▲	C	30	Mapping Scheme ⁹
BLDG_TYPE▲	C	4	Model Building Type ¹⁰
DESIGNLVL▲	C	1	Seismic Design Level: L = Low, M = Moderate, H = High
BIAS▲	C	1	Construction Quality Flag: = “P” for poor, = “T” for typical, = “S” for superior
FOUNDATION	N	1,0	Foundation Type
YEAR_B	N	4,0	Year Built
COST▲	N	10,0	Replacement Cost (thous. \$)
BU_PWR	C	1	Back-up Power: Y = Yes, N= No
FUNCTION	C	10	Function of School
NUM_STUDNT	N	4,0	Number of Students
AREA	N	6,0	Facility Area (sq.ft.)
SHLT_CAP	N	6,0	Facility Shelter Capacity (# people)
KITCHEN	C	1	Kitchen Available: Y = Yes, N= No
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

⁹ The user does not have to specify both the “MAPPING” and the “BLDG_TYPE” fields. Only one is required (the mapping is assigned the “DEFAULT” mapping scheme by default). If both are specified, the BLDG_TYPE is used since it is more accurate.

¹⁰ See footnote above.

E.1.3 High Potential Loss Facilities

E.1.3.1 Dams Inventory

File:	HPDAMS.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
DAM_NAME	C	40	Name of Dam
OWNER	C	25	Owner of the Dam
CLASS	C	5	Type of Dam
COUNTYNAME	C	30	County Name
RIVER	C	30	Name of River
NEAR_CITY	C	30	Nearest City to Dam
DIST_CITY	N	10,0	Distance to Nearest City (mile)
PURPOSE	C	10	Purpose of the Dam:
YEAR_COMPL	N	4,0	Year Dam was Built
DAM_LENGTH	N	10,0	Length of Dam (ft)
DAM_HEIGHT	N	10,0	Height of the Dam (ft)
STRUCT_HGT	N	10,0	Structural Height of Dam (ft)
HYDR_HGT	N	10,0	Hydraulic Height of Dam (ft)
MAX_DISCH	N	10,0	Maximum Discharge Rate (ft ³ /sec)
MAX_STOR	N	10,0	Maximum Storage Area (acre-ft)
NORM_STOR	N	10,0	Normal Storage Area (acre-ft)
SURF_AREA	N	10,0	Surface Area of Water (acres)
DRAIN_AREA	N	10,0	Drainage Area of Dam (sq. miles)
HAZARD	C	1	Relative Hazard Rating (L = Low, S = Significant, H = High)
EAP	C	2	Emergency Action Plan (Y = Yes, N = No, NR = Not Required)
SPILL_TYPE	C	1	Spillway Type on Dam: C = Controlled, U = Uncontrolled, N =
SPILL_WDTH	N	10,0	Spillway Width (ft)
VOLUME	N	10,0	Spillway Volume (yards ³)
COST	N	10,0	Cost of Dam Construction
PRIMARY_SR	C	8	Primary Source Agency
LAT+	N	12,8	Latitude of the Dam
LONG+	N	13,8	Longitude of the Dam
COUNTY+	C	5	County FIPS Code
NAT_ID	C	7	NATDAM ID Number
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.3.2 Levees Inventory

File:	HPLEVEE.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
LEV_NAME	C	40	Name of Levee Segment
OWNER	C	25	Owner of the Levee Segment
CLASS	C	5	Type of Levee (not currently defined)
COUNTYNAME	C	30	County Name
RIVER	C	30	Name of River
NEAR_CITY	C	30	Nearest City to Levee Segment
DIST_CITY	N	10,0	Distance to Nearest City (mile)
YEAR_COMPL	N	4,0	Year Levee Segment was Built
LEV_WIDTH	N	10,0	Width of Levee Segment (ft)
LEV_HEIGHT	N	10,0	Height of the Levee Segment (ft)
LEV_CREST	N	10,0	Elevation of Levee Crest (ft)
NORM_HEIGHT	N	10,0	Normal Height of Water During Most of Year (ft)
DESIGN_BASIS	C	20	Design Basis for Dam (i.e. 100 year flood)
HAZARD	C	1	Relative Hazard Rating (L = Low, S = Significant, H = High)
EAP	C	2	Emergency Action Plan (Y = Yes, N = No, NR = Not Required)
LAT1+	N	10,6	Latitude of Endpoint 1 of Levee Segment
LONG1+	N	11,6	Longitude of Endpoint 1 of Levee Segment
LAT2+	N	10,6	Latitude of Endpoint 2 of Levee Segment
LONG2+	N	11,6	Longitude of Endpoint 2 of Levee Segment
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.3.3 Nuclear Power Facilities Inventory

File:	HPNPF.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS	C	5	Occupancy Class
BLDG_TYPE	C	4	Model Building Type
DESIGNLVL	C	1	Seismic Design Level: L = Low M = Moderate H = High
BIAS	C	1	Construction Quality Flag: = "P" for poor = "T" for typical = "S" for superior
FOUNDATION	N	1,0	Foundation Type
YEAR_B	N	4,0	Year Built
CAPACITY	N	6,0	Capacity (MWatts)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.3.4 Military Installation Inventory

File:	HPMI.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Occupancy Class
BLDG_TYPE	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level:
BIAS▲	C	1	Construction Quality Flag:
FOUNDATION	N	1,0	Foundation Type
COST▲	N	10,0	Replacement Cost (thous. \$)
YEAR_B	N	4,0	Year Built
FUNCTION	C	10	Function of Facility
SHLT_CAP	N	5,0	Shelter Capacity (# people)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.4 User-Defined Structures

File:	UDSINV.DBF
Mappable:	Yes

Name	Type	Length	Description
ID	C	7	Identifier
NAME	C	30	Name
ADDRESS	C	40	Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS	C	5	Occupancy Class
MAPPING	C	30	Mapping Scheme
BLDG_TYPE	C	4	Model Building Type
DESIGNLVL	C	1	Seismic Design Level: L = Low M = Moderate H = High
BIAS	C	1	Construction Quality Flag: = "P" for poor = "T" for typical = "S" for superior
FOUNDATION	N	1,0	Foundation Type
YEAR_B	N	4,0	Year Built
COST	N	10,0	Replacement Cost (thous. \$)
BU_PWR	C	1	Back-up Power: Y = Yes N = No
STORIES	N	2,0	Number of Stories
AREA	N	6,0	Building Area (ft ²)
CAPACITY	N	6,0	Capacity
ELEVAT	N	7,1	Elevation (ft)
LAT	N	12,8	Latitude of Facility
LONG	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.5 Transportation Systems Inventory

E.1.5.1 Inventory Data for Highway

◆ Highway Segments

File:	HRD.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Road Segment Name
OWNER	C	25	Road Segment Owner
CLASS▲	C	5	Analysis Class
NUM_LAN	N	2,0	Number of Lanes
PVMNT	C	10	Pavement Type
WIDTH	N	6,1	Road Width (ft)
LENGTH▲	N	6,2	Section Length (km)
TRAFFIC	N	10,0	Daily Traffic (cars/day)
CAPACITY	N	10,0	Daily Capacity (cars/day)
COST▲	N	10,0	Unit Repair Cost (thous. \$/km)
ELEVAT	N	7,1	Minimum Elevation (ft)
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Highway Bridges**

File:	HBR.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Bridge Name
OWNER	C	25	Bridge Owner
CLASS▲	C	5	Analysis Class
TYPE	C	8	Structure Type (see table 1 below)*
WIDTH	N	6,1	Bridge Width (ft)
LENMAXSPAN	N	6,0	Maximum Span Length (ft)
LENGTH	N	6,0	Total Bridge Length (ft)
NUM_SP	N	2,0	Number of Spans
ANGLE	N	2,0	Skew Angle (degrees)
SEAT_L	N	5,1	Seat Length (ft)
SEAT_W	N	5,1	Seat Width (ft)
YEAR_B	N	4,0	Year Bridge Was Built
YEAR_R	N	4,0	Year Bridge Remodeled
PIER	C	10	Pier Type (see table 2 below)**
FOUNDATION▲	N	1,0	Foundation Type
SCOUR	C	1	Scour Index
TRAFFIC	N	10,0	Daily Traffic (cars/day)
TRAF_INDEX	C	2	Traffic Index
CONDITION	C	3	General Condition Rating (see table 3 below)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Bridge (ft)
LAT+	N	12,8	Latitude of Bridge
LONG+	N	13,8	Longitude of Bridge
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

Table 1: Structure Types are Described are Specified as Follows:

Digit	Digit General Description	Code	Code Description
1	For Main Structure Type Kind of Material and/ or Design	1	Concrete
		2	Concrete Continuous
		3	Steel
		4	Steel Continuous
		5	Prestressed Concrete
		6	Prestressed Concrete Continuous
		7	Timber
		8	Masonry
		9	Aluminum, Wrought Iron or Cast Iron
		0	Other
2,3	For Main Structure Type: Type of Design and Construction	01	Slab
		02	Stringer / Multi-Bean or Girder
		03	Girder and Floor Beam System
		04	Tee Beam
		05	Box Beam or Girder - Multiple
		06	Box Beam or Girder - Single or Spread
		07	Frame
		08	Orthotropic
		09	Truss - Deck
		10	Truss - Thru
		11	Arch - Deck
		12	Arch - Thru
		13	Suspension
		14	Stayed Girder
		15	Movable - Lift
		16	Movable - Bascule
		17	Movable - Swing
		18	Tunnel
		18	Culvert
		20	Mixed Types
4	For Approach Spans Structure Type: Kind of Material and/ or Design	21	Segmental Box Girder
		22	Channel Beam
		00	Other
		1	Concrete
		2	Concrete Continuous
		3	Steel
		4	Steel Continuous
		5	Prestressed Concrete
		6	Prestressed Concrete Continuous
		7	Timber
5,6	For Approach Spans Structure Type: Type of Design and Construction	8	Masonry
		9	Aluminum, Wrought Iron or Cast Iron
		0	Other
		01	Slab
		02	Stringer / Multi-Bean or Girder
		03	Girder and Floor Beam System
		04	Tee Beam

Digit	Digit General Description	Code	Code Description
	For Approach Spans Structure Type of Design and	05	Box Beam or Girder - Multiple
		06	Box Beam or Girder - Single or Spread
		07	Frame
		08	Orthotropic
		09	Truss - Deck
		10	Truss - Thru
		11	Arch - Deck
		12	Arch - Thru
		13	Suspension
		14	Stayed Girder
		15	Movable - Lift
		16	Movable - Bascule
		17	Movable - Swing
		18	Tunnel
		18	Culvert
		20	Mixed Types
		21	Segmental Box Girder
		22	Channel Beam
		00	Other
7,8	Functional Classification of Code for Rural or Urban		
	Rural	01	Principal Arterial - Interstate
		02	Principal Arterial - Other
		06	Minor Arterial
		07	Major Collector
		08	Minor Collector
		09	Local
	Urban	11	Principal Arterial - Interstate
		12	Principal Arterial - Other Freeway or
		14	Other Principal Arterial
		16	Minor Arterial
		17	Collector
		19	Local

Table 2: Pier Types are Described are Specified as Follows:

Digit	Digit General Description	Code	Code Description
1	Reference Feature	H	Highway Beneath Structure
		R	Railroad Beneath Structure
		N	Feature not a Highway or Railroad
2,3,4 and 5	Four Digit Number that Indicates the Minimum Vertical Underclearance		
6,7,8,9 and 10	Five Digit User-Defined Information		

Table 3: Condition Ratings are Specified as Follows:

Digit	Digit General Description	Code	Code Description
1	Condition Rating of Deck		
2	Condition Rating of Superstructure		
3	Condition Rating of Substructure		
		N	Not Applicable
		9	Excellent Condition
		8	Very Good Condition – No problem noted.
		7	Good Condition – Some minor problems.
		6	Satisfactory Condition - Structural elements show some minor deterioration.
		5	Fair Condition – All primary structural elements are sound but may have minor section loss, cracking, spalling or scour.
		4	Poor Condition – Advanced section loss, deterioration, spalling or scour.
		3	Serous Condition – Loss of section, deterioration, spalling or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.
		2	Critical Condition – advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may closely monitored it may be necessary to close thee bridge until corrective action is taken.
		1	“Imminent” Failure Condition – major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic but corrective action may put back in light service.
		0	Failed Condition – Out of service (beyond corrective action.

◆ **Highway Tunnels**

File:	HTU.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Name of Tunnel
OWNER	C	25	Owner of Tunnel
CLASS▲	C	5	Analysis Class
TYPE	C	12	Type of Tunnel
WIDTH	N	6,1	Tunnel Width (ft)
LENGTH	N	6,0	Tunnel Length (ft)
YEAR_B	N	4,0	Year Tunnel Was Built
TRAFFIC	N	10,0	Daily Traffic (cars/day)
CAPACITY	N	10,0	Daily Capacity (cars/day)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Tunnel (ft)
LAT+	N	12,8	Latitude of Tunnel
LONG+	N	13,8	Longitude of Tunnel
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.5.2 Inventory Data for Railway

◆ Railway Track Segments

File:	RTR.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Track Segment Name
OWNER	C	25	Owner of Track Segment
CLASS▲	C	5	Analysis Class
NUM_TRA	N	2,0	Number of Tracks
TRAFFIC	N	10	Daily Traffic (trains/day)
LENGTH▲	N	6,2	Section Length (km)
COST▲	N	10,0	Unit Repair Cost (thous. \$/km)
ELEVAT	N	7,1	Minimum Elevation (ft)
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Railway Bridges**

File:	RBR.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Bridge Name
OWNER	C	25	Bridge Owner
CLASS▲	C	5	Analysis Class
TYPE	C	12	Structure Type
WIDTH	N	6,1	Bridge Width (ft)
LENMAXSPAN	N	6,0	Maximum Span Length (ft)
LENGTH	N	6,0	Total Bridge Length (ft)
NUM_SP	N	2,0	Number of Spans
ANGLE	N	2,0	Skew Angle (degrees)
SEAT_L	N	5,1	Seat Length (ft)
SEAT_W	N	5,1	Seat Width (ft)
YEAR_B	N	4,0	Year Bridge Was Built
YEAR_R	N	4,0	Year Bridge Remodeled
PIER	C	10	Pier Type
FOUNDATION▲	N	1,0	Foundation Type
SCOUR	C	1	Scour Index
TRAFFIC	N	10,0	Daily Traffic (trains/day)
TRAF_INDEX	C	2	Traffic Index
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Bridge (ft)
LAT+	N	12,8	Latitude of Bridge
LONG+	N	13,8	Longitude of Bridge
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Railway Tunnels**

File:	RTU.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Name of Tunnel
OWNER	C	25	Tunnel Owner
CLASS▲	C	5	Analysis Class
TYPE	C	12	Type of Tunnel
WIDTH	N	6,1	Tunnel Width (ft)
LENGTH	N	6,0	Tunnel Length (ft)
YEAR_B	N	4,0	Year Tunnel Was Built
TRAFFIC	N	10,0	Daily Traffic (trains/day)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Tunnel (ft)
LAT+	N	12,8	Latitude of Tunnel
LONG+	N	13,8	Longitude of Tunnel
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Railway Facilities**

File:	RFA.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Analysis Class
FUNCTION	C	10	Function of Facility
BLDG_TYPE ▲	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low M = Moderate H = High
FOUNDATION	N	1,0	Foundation Type
BU_PWR	C	1	Back-up Power: Y = Yes N= No
ANCHOR	C	1	Equipment Anchored: Y = Yes N= No
YEAR_B	N	4,0	Year Facility Was Built
TRAFFIC	N	10,0	Daily Traffic (trains/day)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7.1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.5.3 Inventory Data for Light Rail

◆ Light Rail Track Segments

File:	LTR.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Track Segment Name
OWNER	C	25	Owner of Track Segment
CLASS▲	C	5	Analysis Class
NUM_TRA	N	2,0	Number of Tracks
TRAFFIC	N	10	Daily Traffic (trains/day)
LENGTH▲	N	6.2	Section Length (km)
COST▲	N	10,0	Replacement. Cost (thous. \$/km)
ELEVAT	N	7,1	Minimum Elevation (ft)
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Light Rail Bridges**

File:	LBR.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Bridge Name
OWNER	C	25	Bridge Owner
CLASS▲	C	5	Analysis Class
TYPE	C	12	Structure Type
WIDTH	N	6,1	Bridge Width (ft)
LENMAXSPAN	N	6,0	Maximum Span Length (ft)
LENGTH	N	6,0	Total Bridge Length (ft)
NUM_SP	N	2,0	Number of Spans
ANGLE	N	2,0	Skew Angle (degrees)
SEAT_L	N	5,1	Seat Length (ft)
SEAT_W	N	5,1	Seat Width (ft)
YEAR_B	N	4,0	Year Bridge Was Built
YEAR_R	N	4,0	Year Bridge Remodeled
PIER	C	10	Pier Type
FOUNDATION▲	N	1,0	Foundation Type
SCOUR	C	1	Crosses a River: Y = Yes N= No
TRAFFIC	N	10,0	Daily Traffic (trains/day)
TRAF_INDEX	C	2	Traffic Index
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Bridge (ft)
LAT+	N	12,8	Latitude of Bridge
LONG+	N	13,8	Longitude of Bridge
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Light Rail Tunnels**

File:	LTU.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Name of Tunnel
OWNER	C	25	Tunnel Owner
CLASS▲	C	5	Analysis Class
TYPE	C	12	Type of Tunnel
WIDTH	N	6,1	Tunnel Width (ft)
LENGTH	N	6,0	Tunnel Length (ft)
YEAR_B	N	4,0	Year Tunnel Was Built
TRAFFIC	N	10,0	Daily Traffic (trains/day)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Tunnel (ft)
LAT+	N	12,8	Latitude of Tunnel
LONG+	N	13,8	Longitude of Tunnel
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Light Rail Facilities**

File:	LFA.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Analysis Class
FUNCTION	C	10	Function of Facility
BLDG_TYPE ▲	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low M = Moderate H = High
FOUNDATION	N	1,0	Foundation Type
BU_PWR	C	1	Back-up Power: Y = Yes N = No
ANCHOR	C	1	Equipment Anchored: Y = Yes N = No
YEAR_B	N	4,0	Year Facility Was Built
TRAFFIC	N	10,0	Daily Traffic (trains/day)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.5.4 Inventory Data for Bus Facilities

File:	BFA.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Analysis Class
FUNCTION	C	10	Function of Facility
BLDG_TYPE ▲	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low M = Moderate H = High
FOUNDATION	N	1,0	Foundation Type
BU_PWR	C	1	Back-up Power Y = Yes N = No
ANCHOR	C	1	Equipment Anchored: Y = Yes N = No
YEAR_B	N	4,0	Year Facility Was Built
TRAFFIC	N	10,0	Daily Traffic (buses/day)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.5.5 Inventory Data for Ports Facilities

File:	PFA.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
PORT_ID	C	5	Port Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Analysis Class
FUNCTION	C	10	Function of Facility
BLDG_TYPE ▲	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low, M = Moderate, H = High
FOUNDATION	N	1,0	Foundation Type
BU_PWR	C	1	Back-up Power: Y = Yes, N= No
ANCHOR	C	1	Equipment Anchored: Y = Yes, N= No
YEAR_B	N	4,0	Year Facility Was Built
CAPACITY	N	10,0	Capacity (tons/day)
BERTHS	N	3,0	Number of Berths
CRANE	N	2,0	Number of Cranes
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.5.6 Inventory Data for Ferry Facilities

File:	FFA.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Analysis Class
FUNCTION	C	10	Function of Facility
BLDG_TYPE ▲	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low, M = Moderate, H = High
FOUNDATION	N	1,0	Foundation Type
BU_PWR	C	1	Back-up Power: Y = Yes, N= No
ANCHOR	C	1	Equipment Anchored: Y = Yes, N= No
YEAR_B	N	4,0	Year Facility Was Built
TRAFFIC	N	10,0	Traffic (Ferry/Day)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.5.7 Inventory Data Airport

◆ Airport Facilities

File:	AFA.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
ARPT_ID	C	5	Airport Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Analysis Class
FUNCTION	C	10	Function of Facility
BLDG_TYPE ▲	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low, M = Moderate, H = High
FOUNDATION	N	1,0	Foundation Type
BU_PWR	C	1	Back-up Power: Y = Yes, N= No
ANCHOR	C	1	Equipment Anchored: Y = Yes, N= No
YEAR_B	N	4,0	Year Facility Was Built
FLIGHTS	N	10,0	Capacity (flights/day)
PASSENGERS	N	10,0	Capacity (passengers/day)
CARGO	N	10,0	Capacity (tons/day)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIPS Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Airport Runways**

File:	ARW.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Runway Identifier
NAME	C	30	Runway Name
A_NAME	C	30	Airport Name
ARPT_ID	C	5	Airport Identifier
CLASS▲	C	5	Analysis Class
RNWX_L	N	6,0	Runway Length (ft)
CAPACITY	N	5,0	Capacity (Flights/day)
PAVMNT	C	5	Pavement Type
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Minimum Elevation (ft)
LAT+	N	12,8	Latitude of Airport
LONG+	N	13,8	Longitude of Airport
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.5.8 Transportation System Dollar Exposure

File:	EXPTR.DBF
Mappable:	No

Name	Type	Length	Description
COUNTY	C	30	County Name
HWROAD	N	15,0	Dollar Value of Highway Segments (thous. \$)
HWBRIDGE	N	15,0	Dollar Value of Highway Bridges (thous. \$)
HWTUNNEL	N	15,0	Dollar Value of Highway Tunnels (thous. \$)
RWTRACK	N	15,0	Dollar Value of Railway Segments (thous. \$)
RWBRIDGE	N	15,0	Dollar Value of Railway Bridges (thous. \$)
RWFACILITY	N	15,0	Dollar Value of Railway Facilities (thous. \$)
RWTUNNEL	N	15,0	Dollar Value of Railway Tunnels (thous. \$)
LRTRACK	N	15,0	Dollar Value of Light Rail Tracks (thous. \$)
LRBRIDGE	N	15,0	Dollar Value of Light Rail Bridges (thous. \$)
LRFACILITY	N	15,0	Dollar Value of Light Rail Facilities (thous. \$)
LRTUNNEL	N	15,0	Dollar Value of Light Rail Tunnels (thous. \$)
BSFACILITY	N	15,0	Dollar Value of Bus Facilities (thous. \$)
PHFACILITY	N	15,0	Dollar Value of Port Facilities (thous. \$)
FSFACILITY	N	15,0	Dollar Value of Ferry Facilities (thous. \$)
ATFACILITY	N	15,0	Dollar Value of Airport Facilities (thous. \$)
ATRUNWAY	N	15,0	Dollar Value of Airport Runways (thous. \$)
CNTY_FIPS	C	5	County Fips

E.1.6 Utility Systems Inventory

E.1.6.1 Inventory Data for Potable Water

◆ Potable Water Pipeline Segments

File:	PPL.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Pipeline Name
OWNER	C	25	Pipeline Owner
CLASS▲	C	5	Analysis Class
MATRL	C	10	Material Type
DIAMETER	N	6,1	Nominal Pipe Diameter (inches)
LENGTH	N	6,2	Section Length (km)
JOINT	C	10	Joint Type
YEAR_B	N	4,0	Year Pipe Installed
COST▲	N	10,0	Unit Repair Cost (thous. \$/segment)
ELEVAT	N	7,1	Minimum Elevation (ft)
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Potable Water Facilities**

File:	PWF.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Analysis Class
FUNCTION	C	10	Function of Facility
BDLG_TYPE	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low M = Moderate H = High
FOUNDATION	N	1,0	Foundation Type
BU_PWR	C	1	Back-up Power: Y = Yes N= No
ANCHOR	C	1	Equipment Anchored: Y = Yes N= No
YEAR_B	N	4,0	Facility Year Built
CAPACITY	N	10,0	Capacity (Million Gallons/Day)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ Potable Water Distribution Pipes

File:	PDL.DBF
Mappable:	Yes

Name	Type	Length	Description
TRACT	C	11	Census Tract
PW_DUCT	N	9,1	Potable Water Ductile Distribution Pipes (km)
PW_BRIT	N	9,1	Potable Water Brittle Distribution Pipes (km)
PW_TOTL	N	9,1	Total Potable Water Distribution Pipes (km)

◆ **Potable Water Network System Hydrant**

File:	G_HYDR.DBF
Mappable:	No

Name	Type	Length	Description
ID	C	7	Identifier
SYSTEMID	C	5	Potable Water Network System ID
STATUS	N	1,0	Operational Status: 0 = Open, 2 = Closed
DIAMETER	N	6,1	Nominal Diameter (inches)
MIN_PES	N	8,2	Minimum Operational Pressure (psi)

◆ **Potable Water Network System Tanks**

File:	G_TANK.DBF
Mappable:	No

Name	Type	Length	Description
ID	C	7	Identifier
SYSTEMID	C	5	Potable Water Network System ID
STATUS	N	1,0	Operational Status: 0 = Open, 2 = Closed
INIT_LEV	N	7,1	Initial Hydraulic Grade (ft)
MIN_LEV	N	7,1	Minimum Hydraulic Grade (ft)
MAX_LEV	N	7,1	Maximum Hydraulic Grade (ft)
MIN_VOL	N	7,1	Volume of water below minimum level (ft3)
IS_CIRC	C	1	Is tank Circular: Y = Yes, N = No
DIAMTER	N	6,1	Nominal Diameter (feet)
X_AREA	N	7,1	Cross Sectional Area (sq.ft)

◆ **Potable Water Network System Reservoirs**

File:	G_RSVR.DBF
Mappable:	No

Name	Type	Length	Description
ID	C	7	Identifier
SYSTEMID	C	5	Potable Water Network System ID
STATUS	N	1,0	Operational Status: 0 = Open, 2 = Closed
GRADE	N	7,1	Hydraulic Head (ft.)

◆ **Potable Water Network System Valve**

File:	G_VALVES.DBF
Mappable:	No

Name	Type	Length	Description
ID	C	7	Identifier
SYSTEMID	C	5	Potable Water Network System ID
NODEID	C	5	Potable Water Network System Node ID
VLV_TYPE	N	1,0	Valve Type: 0 = open, 1 = check, 2 = gate, 3 = PRV
PRV_GRDE	N	7,1	Hydraulic head which the PRV is set to maintain downstream

◆ **Potable Water Network System Pumps**

File:	G_PUMP.DBF
Mappable:	No

Name	Type	Length	Description
ID	C	7	Identifier
SYSTEMID	C	5	Potable Water Network System ID
NODEID	C	5	Potable Water Network System Node ID
STATUS	N	1,0	Operational Status: 0 = Open, 2 = Closed
TYPE	N	1,0	Type (=0 constant power, =1 for 3 point-curve)
IS_BOAT	C	1	Is Pump used as a Fireboat: Y = Yes, N = No
POWER	N	8,2	Power Rating (HP)
L_HEAD	N	8,2	Head at Lowest Admissible Flow (ft)
L_FLOW	N	8,2	Lower Admissible Flow (gpm)
M_HEAD	N	8,2	Design or Intermediate Head (ft)
M_FLOW	N	8,2	Design or Intermediate Flow (gpm)
H_HEAD	N	8,2	Head corresponding to highest flow (ft)
H_FLOW	N	8,2	Highest Flow (gpm)

E.1.6.2 Inventory Data for Waste Water

◆ Waste Water Pipeline Segments

File:	WPL.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Pipeline Name
OWNER	C	25	Pipeline Owner
CLASS▲	C	5	Analysis Class
MATRL	C	10	Material Type
diameter	N	6,1	Nominal Pipe Diameter (inches)
JOINT	C	10	Joint Type
LENGTH	N	6,2	Section Length (km)
YEAR_B	N	4,0	Year Pipe Installed
COST▲	N	10,0	Unit Repair Cost (thous. \$/segment)
ELEVAT	N	7,1	Minimum Elevation (ft)
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Waste Water Facilities**

File:	WFA.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Analysis Class
FUNCTION	C	10	Function of Facility
BLDG_TYPE ▲	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low M = Moderate H = High
FOUNDATION	N	1,0	Foundation Type
BU_PWR	C	1	Back-up Power: Y = Yes N= No
ANCHOR	C	1	Equipment Anchored: Y = Yes N= No
YEAR_B	N	4,0	Year Facility Was Built
CAPACITY	N	10,0	Capacity (Million Gallons/Day)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Waste Water Distribution Sewers**

File:	WDL.DBF
Mappable:	Yes

Name	Type	Length	Description
TRACT▲	C	11	Census Tract
WW_DUCT▲	N	9,1	Waste Water Ductile Distribution Pipes (km)
WW_BRIT▲	N	9,1	Waste Water Brittle Distribution Pipes (km)
WW_TOTL▲	N	9,1	Total Waste Water Distribution Pipes (km)

E.1.6.3 Inventory Data for Oil

◆ Crude and Refined Oil Pipe Segments

File:	CRP.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Pipeline Name
OWNER	C	25	Pipeline Owner
CLASS▲	C	5	Analysis Class
MATRL	C	10	Material Type
DIAMETER	N	6,1	Nominal Pipe Diameter (inches)
LENGTH	N	6.2	Section Length (km)
JOINT	C	10	Joint Type
YEAR_B	N	4,0	Year Pipe Installed
COST▲	N	10,0	Unit Repair Cost (thous. \$/segment)
ELEVAT	N	7,1	Minimum Elevation (ft)
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Crude and Refined Oil Facilities**

File:	CRF.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Analysis Class
FUNCTION	C	10	Function of Facility
BLDG_TYPE ▲	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low M = Moderate H = High
FOUNDATION	N	1,0	Foundation Type
BU_PWR	C	1	Back-up Power: Y = Yes N= No
ANCHOR	C	1	Equipment Anchored: Y = Yes N= No
YEAR_B	N	4,0	Year Facility Was Built
CAPACITY	N	10,0	Capacity (Thous. Barrels/Day or Thous. Barrels)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.6.4 Inventory Data Natural Gas

◆ Natural Gas Pipeline Segments

File:	NPL.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Pipeline Name
OWNER	C	25	Pipeline Owner
CLASS▲	C	5	Analysis Class
MATRL	C	10	Material Type
DIAMETER	N	6,1	Nominal Pipe Diameter (inches)
LENGTH	N	6,2	Section Length (km)
JOINT	C	10	Joint Type
YEAR_B	N	4,0	Year Pipe Installed
COST▲	N	10,0	Unit Repair Cost (thous. \$/segment)
ELEVAT	N	7,1	Minimum Elevation (ft)
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Natural Gas Facilities**

File:	NFA.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Analysis Class
FUNCTION	C	10	Function of Facility
BLDG_TYPE ▲	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low M = Moderate H = High
FOUNDATION	N	1,0	Foundation Type
BU_PWR	C	1	Back-up Power: Y = Yes N= No
ANCHOR	C	1	Equipment Anchored: Y = Yes N= No
YEAR_B	N	4,0	Year Facility Was Built
CAPACITY	N	10,0	Capacity (Million ft3/Day)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Natural Gas Distribution Pipes**

File:	NDL.DBF
Mappable:	Yes

Name	Type	Length	Description
TRACT▲	C	11	Census Tract
NG_DUCT▲	N	9,1	Natural Gas Ductile Distribution Pipes (km)
NG_BRIT▲	N	9,1	Natural Gas Brittle Distribution Pipes (km)
NG_TOTL▲	N	9,1	Total Natural Gas Distribution Pipes (km)

E.1.6.5 Inventory Data Electric Power

◆ Electric Power Facilities

File:	EFA.DBF
Mappable:	No

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Analysis Class
FUNCTION	C	10	Function of Facility
BLDG_TYPE ▲	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low M = Moderate H = High
FOUNDATION	N	1,0	Foundation Type
ANCHOR	C	1	Equipment Anchored: Y = Yes N= No
YEAR_B	N	4,0	Year Facility Was Built
CAPACITY	N	10,0	Capacity (Volts/Watts)
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Electrical Distribution Lines**

File:	EDL.DBF
Mappable:	No

Name	Type	Length	Description
TRACT▲	C	11	Census Tract
EP_BLW▲	N	9,1	Underground Electric Cables (km)
EP_ABM▲	N	9,1	Electric Cables Supported on Metal/Concrete Poles (km)
EP_ABW▲	N	9,1	Electric Cables Supported on Wood Poles (km)
EP_TOTL▲	N	9,1	Total Electric Cables (km)

E.1.6.6 Inventory Data Communication

◆ Communication Facilities

File:	CFA.DBF
Mappable:	Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
OWNER	C	25	Facility Owner
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CLASS▲	C	5	Analysis Class
FUNCTION	C	10	Function of Facility
BLDG_TYPE ▲	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low M = Moderate H = High
FOUNDATION	N	1,0	Foundation Type
BU_PWR	C	1	Back-up Power: Y = Yes N= No
ANCHOR	C	1	Equipment Anchored: Y = Yes N= No
YEAR_B	N	4,0	Year Facility Was Built
COST▲	N	10,0	Replacement Cost (thous. \$)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

◆ **Communication Distribution Lines**

File:	CDL.DBF
Mappable:	Yes

Name	Type	Length	Description
TRACT▲	C	11	Census Tract
CM_BLW▲	N	9,1	Underground Communication Cables (km)
CM_AMB▲	N	9,1	Communication Cables Supported on Metal/Concrete Poles (km)
CM_ABW▲	N	9,1	Communication Cables Supported on Wood Poles (km)
CM_TOTL▲	N	9,1	Total Communication Cables (km)

E.1.6.7 Utility System Dollar Exposure

File: EXPUT.DBF

Mappable: No

Name	Type	Length	Description
COUNTY	C	30	County Name
PWFACILITY	N	15,0	Dollar Value of Potable Water Facilities (thous. \$)
PWPIPELINE	N	15,0	Dollar Value of Potable Water Pipelines (thous. \$)
PWDL	N	15,0	Dollar Value of Potable Water Distribution lines ((thous. \$)
WWFACILITY	N	15,0	Dollar Value of Waste Water Facilities (thous. \$)
WWPIPELINE	N	15,0	Dollar Value of Waste Water Pipelines (thous. \$)
WWDL	N	15,0	Dollar Value of Waste Water Distribution lines ((thous. \$)
OSFACILITY	N	15,0	Dollar Value of Oil System Facilities (thous. \$)
OSPIPELINE	N	15,0	Dollar Value of Oil System Pipelines (thous. \$)
NGFACILITY	N	15,0	Dollar Value of Natural Gas Facilities (thous. \$)
NGPIPELINE	N	15,0	Dollar Value of Natural Gas Pipelines (thous. \$)
NGDL	N	15,0	Dollar Value of Natural Gas Distribution lines ((thous. \$)
EPFACILITY	N	15,0	Dollar Value of Electric Power Facilities (thous. \$)
EPDL	N	15,0	Dollar Value of Electric Power Distribution lines (thous. \$)
CMFACILITY	N	15,0	Dollar Value of Communication Facilities (thous. \$)
CMDL	N	15,0	Dollar Value of Communication Distribution Pipelines (thous. \$)
CNTY_FIPS	C	5	County Fips

E.1.7 Hazardous Materials Inventory

File: HAZMAT.dbf

Mappable: Yes

Name	Type	Length	Description
ID+	C	7	Identifier
NAME	C	30	Facility Name
ADDRESS	C	40	Facility Address
CITY	C	30	City
STATE	C	2	State
ZIPCODE	C	10	ZIP Code
CONTACT	C	25	Contact Person
PHONE	C	14	Telephone Number
CAS	C	9	CAS Registry Number
CHEM_NAME	C	30	Chemical Name
CHEM_QUANT	N	10,0	Chemical Quantity (lbs.)
SIC	C	4	SIC Number
CLASS▲	C	5	Class
BLDG_TYPE▲	C	4	Model Building Type
DESIGNLVL▲	C	1	Seismic Design Level: L = Low M = Moderate H = High
BIAS▲	C	1	Construction Quality Flag: = "P" for poor = "T" for typical = "S" for superior
FOUNDATION	N	1,0	Foundation Type
YEAR_B	N	4,0	Year Facility Was Built
EPA_ID	C	12	EPA ID Number
PER_AMNT	N	10,0	Permit Amount (lbs.)
ELEVAT	N	7,1	Elevation of Facility (ft)
LAT+	N	12,8	Latitude of Facility
LONG+	N	13,8	Longitude of Facility
GEORES	C	8	Geocoding Results Code
COUNTY+	C	5	County FIP Code
COMMENT	C	40	Misc. Comments
ID_	C	8	(HAZUS Internal ID)

E.1.8 Demographics - Population Inventory

File: POPHSNG.DBF

Mappable: No

Name	Type	Length	Description
TRACT▲	C	11	Census Tract Number
POP▲	N	11,0	Total Population in Census Tract
HHLDA	N	11,0	Total Household in Census Tract
GQ▲	N	11,0	Total Number of People in General Quarter
AGE_16▲	N	11,0	Total Number of People < 16 years old
AGE16_65▲	N	11,0	Total Number of People 16-65 years old
AGE_65▲	N	11,0	Total Number of People > 65 years old
RC_W▲	N	11,0	Total Number of People - White
RC_B▲	N	11,0	Total Number of People - Black
RC_NA▲	N	11,0	Total Number of People - Native American
RC_A▲	N	11,0	Total Number of People - Asian
RC_H▲	N	11,0	Total Number of People - Hispanic
INC_10▲	N	11,0	Total # of Households with Income < \$10,000
INC10_15▲	N	11,0	Total # of Households with Income \$10 - \$15K
INC15_25▲	N	11,0	Total # of Households with Income \$15 - \$25K
INC25_35▲	N	11,0	Total # of Households with Income \$25 - \$35K
INC_35▲	N	11,0	Total # of Households with Income > \$35,000
RES_D▲	N	11,0	Total in Residential Property during Day
RES_N▲	N	11,0	Total in Residential Property at Night
COM_WRK▲	N	11,0	Total Working Population in Commercial Industry
IND_WRK▲	N	11,0	Total Working Population in industrial Industry
COMM▲	N	11,0	Total Commuting at 5 PM
HUOO_SHU▲	N	11,0	Total Owner Occupied - Single Household Units
HUOO_MHU	N	11,0	Total Owner Occupied - Multi-Household Units
HUOO_MHS▲	N	11,0	Total Owner Occupied - Multi-Household Structure
HUOO_MOB	N	11,0	Total Owner Occupied - Mobile Homes
HURO_SHU▲	N	11,0	Total Renter Occupied - Single Household Units
HURO_MHU	N	11,0	Total Renter Occupied - Multi-Household Units
HURO_MHS▲	N	11,0	Total Renter Occupied - Multi-Household Structure
HURO_MOB	N	11,0	Total Renter Occupied - Mobile Homes
HUV_SHU▲	N	11,0	Total Vacant - Single Household Units
HUV_MHU▲	N	11,0	Total Vacant - Multi-Household Units
HUV_MHS▲	N	11,0	Total Vacant - Multi-Household Structure
HUV_MOB▲	N	11,0	Total Vacant - Mobile Homes
HU_U40▲	N	11,0	Structures Built Prior to 1940
HU_O40▲	N	11,0	Structures Built After 1940
HURO_AV▲	N	5,0	Average Rent per Rented Occupied Unit
HUOO_AV▲	N	5,0	Average Value per Owner Occupied Unit

E.1.9 Agriculture Product Inventory

File: AGP.DBF

Mappable: Yes

Name	Type	Length	Description
TRACT	C	11	Census Tract Number
GRAIN	N	9,0	Value of Grain Crops (thous. \$)
VEGFRUIT	N	9,0	Value of Vegetable/Fruit Crops (thous. \$)
ORCHARD	N	9,0	Value of Fruit/Nut Orchards (thous. \$)
LIVSTOCK	N	9,0	Value of Livestock (thous. \$)
TIMBER	N	9,0	Timber Value (thous. \$)
MACHINE	N	9,0	Value of Grain Crops (thous. \$)

E.1.10 Vehicle Inventory

File:	VEH.DBF
Mappable:	Yes

Name	Type	Length	Description
TRACT	C	11	Census Tract Number
CARS	N	9,0	Value of Cars, Buses, Trucks, Etc. (thous. \$)
TRAINS	N	9,0	Value of Railroad Rolling Stock (thous. \$)
BOATS	N	9,0	Value of Boats (thous. \$)

E.2 Hazard Databases

E.2.1 Liquefaction Database

File:	LQFDEF.DBF
Mappable:	Yes

Name	Type	Length	Description
TYPE ▲	N	1,0	Liquefaction susceptibility factor: = 0 for none = 1 for very low susceptibility = 2 for low susceptibility = 3 for moderate susceptibility = 4 for high susceptibility = 5 for very high susceptibility

* Note: The liquefaction susceptibility database file is specified through the “Hazard/Data Maps” menu option. If no file is specified, **HAZUS** assumes no liquefaction.

E.2.2 Landslide Database¹¹

File:	LNDEF.DBF
Mappable:	Yes

Name	Type	Length	Description
TYPE	N	2,0	<p>Landslide Susceptibility Factors,</p> <p>0 = Not Susceptible Soil</p> <p>1 = Soil A, Slope Angle 15-20</p> <p>2 = Soil A, Slope Angle 20-30</p> <p>3 = Soil B, Slope Angle 10-15</p> <p>4 = Soil B, Slope Angle 15-20</p> <p>5 = Soil A, Slope Angle 30-40</p> <p>6 = Soil C, Slope Angle 1-10</p> <p>7 = Soil A, Slope Angle >40, or, Soil B, Slope Angle 20-30</p> <p>8 = Soil B, Slope Angle 30-40 or, Soil B, Slope Angle >40 or, Soil C, Slope Angle 10-15</p> <p>9 = Soil C, Slope Angle 15-20 or, Soil C, Slope Angle 20-30 or, Soil C, Slope Angle 30-40 or, Soil C, Slope Angle >40</p> <p>3 = Soil A, Slope Angle 10-15</p> <p>4 = Soil A, Slope Angle 15-20</p> <p>6 = Soil B, Slope Angle 1-10</p> <p>7 = Soil A, Slope Angle 20-30</p> <p>8 = Soil A, Slope Angle 30-40 or, Soil A, Slope Angle >40 or, Soil B, Slope Angle 10-15</p> <p>9 = Soil B, Slope Angle 15-20 or, Soil B, Slope Angle 20-30 or, Soil B, Slope Angle 30-40 or, Soil B, Slope Angle >40 or, Soil C, Slope Angle 1-10</p> <p>10 = Soil C, Slope Angle 10-15 or, Soil C, Slope Angle 15-20 or, Soil C, Slope Angle 20-30 or, Soil C, Slope Angle 30-40 or, Soil C, Slope Angle >40</p>

¹¹ The landslide susceptibility database file is specified through the “Hazard/Data Maps” menu option. If no file is specified, HAZUS assumes no landslide.

E.2.3 Water Depth Database

File:	WDPTHDEF..DBF
Mappable:	Yes

Name	Type	Length	Description
DEPTH ▲	N	3,0	Water Depth (feet)

E.2.4 Soil Type Database¹²

File:	SOILDEF.DBF
Mappable:	Yes

Name	Type	Length	Description
TYPE ▲	N	1,0	Soil type where: = 1 for soil type A (hard rock) = 2 for soil type B (rock) = 3 for soil type C (very dense soil and soft rock) = 4 for soil type D (stiff soils) = 5 for soil type E (soft soils) = 6 for soil type F (need site specific evaluation)

¹² This soil type user-defined database file is specified through the “Hazard/Data Maps” menu option. If no file is specified, **HAZUS** assumes a combination soil type D.

E.2.5 User Defined Hazard Maps

Four files are needed to run a scenario using the “User Defined” option in HAZUS. These are: Peak ground shaking acceleration map (PGA), peak ground shaking velocity map (PGV), spectral acceleration map at 0.3 seconds, and spectral acceleration map at 1.0 seconds.

The user has full control on how to name these files and on how many attributes or fields these files should contain. The only requirement, however, is to have one field named “VALUE” in all these files, which contain the ground motion information. Note that for the three acceleration files, the units of the “VALUE” field are in g’s, while for the PGV file, the units of the “VALUE” field are in inches/second.

Files:	“User Defined”
Mappable:	Yes

Name	Type	Length	Description
VALUE ▲	N	8.3	Ground motion parameter value

E.3 Analysis Databases

E.3.1 Damage Functions

E.3.1.1 Damage Function for General Building Stock

◆ Capacity Curves

There are 3 files, one for each design level (h = high, m = moderate, l = low)

File:	TCCH.DBF, TCCM.DBF, TCCL.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	3,0	Identifier Number
LABEL▲	C	5	Model Building Type Label
SD_YIELD_O▲	N	7,3	Yield Spectral Displacement - Code (inches)
SA_YIELD_O▲	N	7,3	Yield Spectral Acceleration - Code (inches)
SD_ULTIM_O	N	7,3	Ultimate Spectral Displacement - Code (inches)
SA_ULTIM_O	N	7,3	Ultimate Spectral Acceleration - Code (inches)
KAPPA_OS▲	N	6,2	Degradation Factor for Short Duration - Code
KAPPA_OM▲	N	6,2	Degradation Factor for Medium Duration - Code
KAPPA_OL▲	N	6,2	Degradation Factor for Long Duration - Code
DAMP_O▲	N	4,0	Damping - Code
FRAC_O▲	N	6,2	Fraction - Code
SD_YIELD_I▲	N	7,3	Yield Spectral Displacement - Poor (inches)
SA_YIELD_I▲	N	7,3	Yield Spectral Acceleration - Poor (inches)
SD_ULTIM_I▲	N	7,3	Ultimate Spectral Displacement - Poor (inches)
SA_ULTIM_I▲	N	7,3	Ultimate Spectral Acceleration - Poor (inches)
KAPPA_IS▲	N	6,2	Degradation Factor for Short Duration - Poor
KAPPA_IM▲	N	6,2	Degradation Factor for Medium Duration - Poor
KAPPA_IL▲	N	6,2	Degradation Factor for Long Duration - Poor
DAMP_I▲	N	4,0	Damping - Poor
FRAC_I▲	N	6,2	Fraction - Poor
SD_YIELD_S▲	N	7,3	Yield Spectral Displacement - Superior (inches)
SA_YIELD_S▲	N	7,3	Yield Spectral Acceleration - Superior (inches)
SD_ULTIM_S▲	N	7,3	Ultimate Spectral Displacement - Superior (inches)
SA_ULTIM_S▲	N	7,3	Ultimate Spectral Acceleration - Superior (inches)
KAPPA_SS▲	N	6,2	Degradation Factor for Short Duration - Superior
KAPPA_SM▲	N	6,2	Degradation Factor for Medium Duration - Superior
KAPPA_SL▲	N	6,2	Degradation Factor for Long Duration - Superior
DAMP_S▲	N	4,0	Damping - Superior
FRAC_S▲	N	6,2	Fraction - Superior

◆ **Fragility Curves**

Structural

There are 3 files, one for each design level (h = high, m = moderate, l = low)

File:	TFCSH.DBF, TFCSM.DBF, TFCSL.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	3,0	Identifier Number
<i>LABEL</i> ▲	N	5	Model Building Type Label
MEDIAN_ST▲	N	6,2	Median Displacement for Slight Damage State - Code
BETA_ST▲	N	6,2	Beta for the Slight Damage State - Code
OFFSET_ST▲	N	7,3	Offset for Slight Damage State - Code
MEDIAN_MT	N	6,2	Median Displacement for Moderate Damage State - Code
BETA_MT▲	N	6,2	Beta for the Moderate Damage State - Code
OFFSET_MT▲	N	7,3	Offset for Moderate Damage State - Code
MEDIAN_ET▲	N	6,2	Median Displacement for Extensive Damage State - Code
BETA_ET▲	N	6,2	Beta for the Extensive Damage State - Code
OFFSET_ET▲	N	7,3	Offset for Extensive Damage State - Code
MEDIAN_CT▲	N	6,2	Median Displacement for Complete Damage State - Code
BETA_CT▲	N	6,2	Beta for the Complete Damage State - Code
OFFSET_CT▲	N	7,3	Offset for Complete Damage State - Code
MEDIAN_SP▲	N	6,2	Median Displacement for Slight Damage State - Poor
BETA_SP▲	N	6,2	Beta for the Slight Damage State - Poor
OFFSET_SP▲	N	7,3	Offset for Slight Damage State - Poor
MEDIAN_MP	N	6,2	Median Displacement for Moderate Damage State - Poor
BETA_MP▲	N	6,2	Beta for the Moderate Damage State - Poor
OFFSET_MP▲	N	7,3	Offset for Moderate Damage State - Poor
MEDIAN_EP▲	N	6,2	Median Displacement for Extensive Damage State - Poor
BETA_EP▲	N	6,2	Beta for the Extensive Damage State - Poor
OFFSET_EP▲	N	7,3	Offset for Extensive Damage State - Poor
MEDIAN_CP▲	N	6,2	Median Displacement for Complete Damage State - Poor
BETA_CP▲	N	6,2	Beta for the Complete Damage State - Poor
OFFSET_CP▲	N	7,3	Offset for Complete Damage State - Poor
MEDIAN_SS▲	N	6,2	Median Displacement for Slight Damage State - Superior
BETA_SS▲	N	6,2	Beta for the Slight Damage State - Superior
OFFSET_SS▲	N	7,3	Offset for Slight Damage State - Superior
MEDIAN_MS	N	6,2	Median Displacement for Moderate Damage State - Superior
BETA_MS▲	N	6,2	Beta for the Moderate Damage State - Superior
OFFSET_MS▲	N	7,3	Offset for Moderate Damage State - Superior
MEDIAN_ES▲	N	6,2	Median Displacement for Extensive Damage State - Superior
BETA_ES▲	N	6,2	Beta for the Extensive Damage State - Superior
OFFSET_ES▲	N	7,3	Offset for Extensive Damage State - Superior
MEDIAN_CS▲	N	6,2	Median Displacement for Complete Damage State - Superior
BETA_CS▲	N	6,2	Beta for the Complete Damage State - Superior
OFFSET_CS▲	N	7,3	Offset for Complete Damage State - Superior

Non-structural/Drift Sensitive

There are 3 files, one for each design level (h = high, m = moderate, l = low)

File:	TFCDH.DBF, TFCDM.DBF, TFCDL.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	3,0	Identifier Number
LABEL▲	N	5	Model Building Type Label
MEDIAN_ST▲	N	6,2	Median Displacement for Slight Damage State - Code
BETA_ST▲	N	6,2	Beta for the Slight Damage State - Code
OFFSET_ST▲	N	7,3	Offset for Slight Damage State - Code
MEDIAN_MT	N	6,2	Median Displacement for Moderate Damage State - Code
BETA_MT▲	N	6,2	Beta for the Moderate Damage State - Code
OFFSET_MT▲	N	7,3	Offset for Moderate Damage State - Code
MEDIAN_ET▲	N	6,2	Median Displacement for Extensive Damage State - Code
BETA_ET▲	N	6,2	Beta for the Extensive Damage State - Code
OFFSET_ET▲	N	7,3	Offset for Extensive Damage State - Code
MEDIAN_CT▲	N	6,2	Median Displacement for Complete Damage State - Code
BETA_CT▲	N	6,2	Beta for the Complete Damage State - Code
OFFSET_CT▲	N	7,3	Offset for Complete Damage State - Code
MEDIAN_SP▲	N	6,2	Median Displacement for Slight Damage State - Poor
BETA_SP▲	N	6,2	Beta for the Slight Damage State - Poor
OFFSET_SP▲	N	7,3	Offset for Slight Damage State - Poor
MEDIAN_MP	N	6,2	Median Displacement for Moderate Damage State - Poor
BETA_MP▲	N	6,2	Beta for the Moderate Damage State - Poor
OFFSET_MP▲	N	7,3	Offset for Moderate Damage State - Poor
MEDIAN_EP▲	N	6,2	Median Displacement for Extensive Damage State - Poor
BETA_EP▲	N	6,2	Beta for the Extensive Damage State - Poor
OFFSET_EP▲	N	7,3	Offset for Extensive Damage State - Poor
MEDIAN_CP▲	N	6,2	Median Displacement for Complete Damage State - Poor
BETA_CP▲	N	6,2	Beta for the Complete Damage State - Poor
OFFSET_CP▲	N	7,3	Offset for Complete Damage State - Poor
MEDIAN_SS▲	N	6,2	Median Displacement for Slight Damage State - Superior
BETA_SS▲	N	6,2	Beta for the Slight Damage State - Superior
OFFSET_SS▲	N	7,3	Offset for Slight Damage State - Superior
MEDIAN_MS	N	6,2	Median Displacement for Moderate Damage State - Superior
BETA_MS▲	N	6,2	Beta for the Moderate Damage State - Superior
OFFSET_MS▲	N	7,3	Offset for Moderate Damage State - Superior
MEDIAN_ES▲	N	6,2	Median Displacement for Extensive Damage State - Superior
BETA_ES▲	N	6,2	Beta for the Extensive Damage State - Superior
OFFSET_ES▲	N	7,3	Offset for Extensive Damage State - Superior
MEDIAN_CS▲	N	6,2	Median Displacement for Complete Damage State - Superior
BETA_CS▲	N	6,2	Beta for the Complete Damage State - Superior
OFFSET_CS▲	N	7,3	Offset for Complete Damage State - Superior

Non-structural/Acceleration Sensitive

There are 3 files, one for each design level (h = high, m = moderate, l = low)

File:	TFCAH.DBF, TFCAM.DBF, TFCAL.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	3,0	Identifier Number
LABEL▲	N	5	Model Building Type Label
MEDIAN_ST▲	N	6,2	Median Displacement for Slight Damage State - Code
BETA_ST▲	N	6,2	Beta for the Slight Damage State - Code
OFFSET_ST▲	N	7,3	Offset for Slight Damage State - Code
MEDIAN_MT	N	6,2	Median Displacement for Moderate Damage State - Code
BETA_MT▲	N	6,2	Beta for the Moderate Damage State - Code
OFFSET_MT▲	N	7,3	Offset for Moderate Damage State - Code
MEDIAN_ET▲	N	6,2	Median Displacement for Extensive Damage State - Code
BETA_ET▲	N	6,2	Beta for the Extensive Damage State - Code
OFFSET_ET▲	N	7,3	Offset for Extensive Damage State - Code
MEDIAN_CT▲	N	6,2	Median Displacement for Complete Damage State - Code
BETA_CT▲	N	6,2	Beta for the Complete Damage State - Code
OFFSET_CT▲	N	7,3	Offset for Complete Damage State - Code
MEDIAN_SP▲	N	6,2	Median Displacement for Slight Damage State - Poor
BETA_SP▲	N	6,2	Beta for the Slight Damage State - Poor
OFFSET_SP▲	N	7,3	Offset for Slight Damage State - Poor
MEDIAN_MP	N	6,2	Median Displacement for Moderate Damage State - Poor
BETA_MP▲	N	6,2	Beta for the Moderate Damage State - Poor
OFFSET_MP▲	N	7,3	Offset for Moderate Damage State - Poor
MEDIAN_EP▲	N	6,2	Median Displacement for Extensive Damage State - Poor
BETA_EP▲	N	6,2	Beta for the Extensive Damage State - Poor
OFFSET_EP▲	N	7,3	Offset for Extensive Damage State - Poor
MEDIAN_CP▲	N	6,2	Median Displacement for Complete Damage State - Poor
BETA_CP▲	N	6,2	Beta for the Complete Damage State - Poor
OFFSET_CP▲	N	7,3	Offset for Complete Damage State - Poor
MEDIAN_SS▲	N	6,2	Median Displacement for Slight Damage State - Superior
BETA_SS▲	N	6,2	Beta for the Slight Damage State - Superior
OFFSET_SS▲	N	7,3	Offset for Slight Damage State - Superior
MEDIAN_MS	N	6,2	Median Displacement for Moderate Damage State - Superior
BETA_MS▲	N	6,2	Beta for the Moderate Damage State - Superior
OFFSET_MS▲	N	7,3	Offset for Moderate Damage State - Superior
MEDIAN_ES▲	N	6,2	Median Displacement for Extensive Damage State - Superior
BETA_ES▲	N	6,2	Beta for the Extensive Damage State - Superior
OFFSET_ES▲	N	7,3	Offset for Extensive Damage State - Superior
MEDIAN_CS▲	N	6,2	Median Displacement for Complete Damage State - Superior
BETA_CS▲	N	6,2	Beta for the Complete Damage State - Superior
OFFSET_CS▲	N	7,3	Offset for Complete Damage State - Superior

E.3.1.2 Damage Functions for Transportation Systems

◆ Damage Functions for Transportation Systems - PGA

File: DFxxPGA.DBF where xx is:

= HW for highways
 = RW for railways
 = LR for light rail
 = BS for bus
 = PH for port & harbor
 = FS for ferry
 = AT for airport

Mappable: No

Name	Type	Length	Description
NO▲	N	3,0	Identifier Number
<i>LABEL</i> ▲	C	5	Transportation System Classification Label
MEDIAN_S▲	N	7,2	Median PGA for Slight Damage State (g)
BETA_S▲	N	7,2	Beta for Slight Damage State
MEDIAN_M▲	N	7,2	Median PGA for Moderate Damage State (g)
BETA_M▲	N	7,2	Beta for Moderate Damage State
MEDIAN_E▲	N	7,2	Median PGA for Extensive Damage State (g)
BETA_E▲	N	7,2	Beta for Extensive Damage State
MEDIAN_C▲	N	7,2	Median PGA for Complete Damage State (g)
BETA_C▲	N	7,2	Beta for Complete Damage State

◆ **Damage Functions of Transportation Systems - PGD**

File: DFxxPGD.DBF where xx is:

= HW for highways
 = RW for railways
 = LR for light rail
 = BS for bus
 = PH for port & harbor
 = FS for ferry
 = AT for airport

Mappable: No

Name	Type	Length	Description
NO▲	N	3,0	Identifier Number
<i>LABEL</i> ▲	C	5	Transportation System Classification Label
MEDIAN_S▲	N	7,2	Median PGD for Slight Damage State (in.)
BETA_S▲	N	7,2	Beta for Slight Damage State
MEDIAN_M▲	N	7,2	Median PGD for Moderate Damage State (in.)
BETA_M▲	N	7,2	Beta for Moderate Damage State
MEDIAN_E▲	N	7,2	Median PGD for Extensive Damage State (in.)
BETA_E▲	N	7,2	Beta for Extensive Damage State
MEDIAN_C▲	N	7,2	Median PGD for Complete Damage State (in.)
BETA_C▲	N	7,2	Beta for Complete Damage State

E.3.1.3 Damage Functions for Utility Systems

◆ Damage Functions for Utility Systems - PGA

File: DFxxPGA.DBF where xx is:

= PW for potable water
 = WW for waste water
 = OS for oil system
 = NG for natural gas
 = EP for electric power
 = CM for communication

Mappable: No

Name	Type	Length	Description
NO▲	N	3,0	Identifier Number
<i>LABEL</i> ▲	C	5	Utility System Classification Label
MEDIAN_S▲	N	7,2	Median PGA for Slight Damage State (g)
BETA_S▲	N	7,2	Beta for Slight Damage State
MEDIAN_M▲	N	7,2	Median PGA for Moderate Damage State (g)
BETA_M▲	N	7,2	Beta for Moderate Damage State
MEDIAN_E▲	N	7,2	Median PGA for Extensive Damage State (g)
BETA_E▲	N	7,2	Beta for Extensive Damage State
MEDIAN_C▲	N	7,2	Median PGA for Complete Damage State (g)
BETA_C▲	N	7,2	Beta for Complete Damage State

◆ **Damage Functions for Utility Systems - PGD (Facilities)**

File:	DFPGD.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	3,0	Identifier Number
<i>LABEL</i> ▲	C	5	Utility System Classification Label
MEDIAN_S▲	N	7,2	Median PGA for Slight Damage State (g)
BETA_S▲	N	7,2	Beta for Slight Damage State
MEDIAN_M▲	N	7,2	Median PGA for Moderate Damage State (g)
BETA_M▲	N	7,2	Beta for Moderate Damage State
MEDIAN_E▲	N	7,2	Median PGA for Extensive Damage State (g)
BETA_E▲	N	7,2	Beta for Extensive Damage State
MEDIAN_C▲	N	7,2	Median PGA for Complete Damage State (g)
BETA_C▲	N	7,2	Beta for Complete Damage State

◆ **Damage Functions for Utility Systems - PGD and PGD Multiplier (Pipelines)**

File:	DFPL.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	3,0	Identifier Number
CLASS▲	C	5	Pipeline Analysis Class
DESCRIPT▲	C	42	Pipeline Classification Description
PGV_MULTIP ▲	N	10,6	Peak Ground Velocity - Multiple
PGD_MULTIP ▲	N	10,3	Peak Ground Deformation Multiple

E.3.2 Restorations Functions

E.3.2.1 Restoration Functions for Essential Facilities

File:	RREXX.DBF
	= FC for Medical Care Facilities
	= EF for Emergency Facilities
	= FS for Schools

Mappable:	No
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Name	Type	Length	Description
NO [▲]	N	3,0	Identifier Number
<i>LABEL</i> [▲]	C	5	Essential Facility Classification Label
MEAN_S [▲]	N	7,2	Median Restoration Time for Slight Damage State (days)
SIGMA_S [▲]	N	7,2	Sigma for Slight Damage State
MEAN_M [▲]	N	7,2	Median Restoration Time for Moderate Damage State (days)
SIGMA_M [▲]	N	7,2	Sigma for Moderate Damage State
MEAN_E [▲]	N	7,2	Median Restoration Time for Extensive Damage State (days)
SIGMA_E [▲]	N	7,2	Sigma for Extensive Damage State
MEAN_C [▲]	N	7,2	Median Restoration Time for Complete Damage State (days)
SIGMA_C [▲]	N	7,2	Sigma for Complete Damage State

E.3.2.2 Restoration Functions for Transportation Systems

File: RRxx.DBF where xx is:

= HW for highways
 = RW for railways
 = LR for light rail
 = BS for bus
 = PH for port & harbor
 = FS for ferry
 = AT for airport

Mappable: No

Name	Type	Length	Description
NO▲	N	3,0	Identifier Number
<i>LABEL</i> ▲	C	5	Transportation System Classification Label
MEAN_S▲	N	7,2	Median Restoration Time for Slight Damage State (days)
SIGMA_S▲	N	7,2	Sigma for Slight Damage State
MEAN_M▲	N	7,2	Median Restoration Time for Moderate Damage State (days)
SIGMA_M▲	N	7,2	Sigma for Moderate Damage State
MEAN_E▲	N	7,2	Median Restoration Time for Extensive Damage State (days)
SIGMA_E▲	N	7,2	Sigma for Extensive Damage State
MEAN_C▲	N	7,2	Median Restoration Time for Complete Damage State (days)
SIGMA_C▲	N	7,2	Sigma for Complete Damage State

E.3.2.3 Restoration Functions for Utility Systems

◆ Facilities

File: RRxx.DBF where xx is:

- = PW for potable water
- = WW for waste water
- = OS for oil system
- = NG for natural gas
- = EP for electric power
- = CM for communication

Mappable: No

Name	Type	Length	Description
NO▲	N	3,0	Identifier Number
<i>LABEL▲</i>	C	5	Utility System Classification Label
MEAN_S▲	N	7,2	Median Restoration Time for Slight Damage State (days)
SIGMA_S▲	N	7,2	Sigma for Slight Damage State
MEAN_M▲	N	7,2	Median Restoration Time for Moderate Damage State (days)
SIGMA_M▲	N	7,2	Sigma for Moderate Damage State
MEAN_E▲	N	7,2	Median Restoration Time for Extensive Damage State (days)
SIGMA_E▲	N	7,2	Sigma for Extensive Damage State
MEAN_C▲	N	7,2	Median Restoration Time for Complete Damage State (days)
SIGMA_C▲	N	7,2	Sigma for Complete Damage State

◆ **Pipelines**

File: INPWRPL2.DBF for Potable Water
RRPL.DBF for Waste Water, Oil, and
Natural Gas Pipelines

Mappable: No

Name	Type	Length	Description
CATEGORY▲	C		Pipeline Category
DIA_FROM▲	N	3,0	Pipe Diameter - From (in)
DIA_TO▲	N	3,0	Pipe Diameter - To (in)
FIX_BREAKS▲	N	5,2	Number of Breaks Fixed per Day per Worker
FIX_LEAKS▲	N	5,2	Number of Leaks Fixed per Day per Worker
N_PERSONS▲	N	10,0	Number of Workers
PRIORITY▲	N	1,0	Priority Flag

E.3.3 Analysis Parameters

E.3.3.1 General Building Stock

File:	SQFTB;DG.DBF
Mappable:	Yes

Name	Type	Length	Description
OCCU▲	C	7	Occupancy Type
SQFTPERBLD ▲	N	10,2	Area per Building (ft2)

E.3.3.2 Hazard Analysis Parameters

◆ Short Period Amplification

File:	T048.DBF
Mappable:	No

Name	Type	Length	Description
PGA ▲	N	3,1	Peak Ground Acceleration (g)
SA▲	N	4,2	Spectral Acceleration (g)
A▲	N	4,2	For Soil Type A
B▲	N	4,2	For Soil Type B
C▲	N	4,2	For Soil Type C
D▲	N	4,2	For Soil Type D
E▲	N	4,2	For Soil Type E

◆ **Mid Period Amplification**

File:	T048.DBF
Mappable:	No

Name	Type	Length	Description
PGV ▲	N	5,1	Peak Ground Velocity (in/sec)
SA▲	N	3,1	Spectral Acceleration (g)
A▲	N	4,2	For Soil Type A
B▲	N	4,2	For Soil Type B
C▲	N	4,2	For Soil Type C
D▲	N	4,2	For Soil Type D
E▲	N	4,2	For Soil Type E

◆ **Liquefaction**

File:	T0412.DBF
Mappable:	No

Name	Type	Length	Description
SUSCEPT ▲	N	2,0	Liquefaction Susceptibility Codes: 0, 1, 2, 3, 4 or 5
LABEL▲	C	10	Liquefaction Susceptibility Codes Descriptions: None = 0 Very Low = 1 Low = 2 Moderate = 3 High = 4 Very High = 5
RATIO▲	N	5,2	Proportion of Area Susceptible to Liquefaction

◆ **Landslide**

File:	T0419.DBF
Mappable:	No

Name	Type	Length	Description
SUSCEPT ▲	N	2,0	Landslide Susceptibility Classes: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10
LABEL▲	C	10	Landslide Susceptibility Classes : None = 0 Class I = 1 Class II = 2 Class III = 3 Class IV = 4 Class V = 5 Class VI = 6 Class VII = 7 Class VIII = 8 Class IX = 9 Class X = 10
RATIO▲	N	5,2	Proportion of Area Susceptible to Landslide

E.3.3.3 Inundation Analysis Data Files

File:	(User specified)
Mappable:	Yes

Name	Type	Length	Description
TYPE ▲	N	1,0	Inundation potential: = 1 Low = 2 Significant = 3 High.

Note: The inundation potential user-defined database files (for dams, tsunamis, levees, and seiches) are specified through the “Analysis/Inundation Files” menu option. If no files are specified, HAZUS assumes no potential. Refer to Chapter 9 Induced Damage Models - Inundation in the Technical Manual for more details.

E.3.3.4 Analysis Parameters for Fire Following

Note that data for this parameter is not part of the Technical Manual and could be supplied by the user.

E.3.3.5 Debris Module Databases

◆ Debris Generated from Wood, Brick, and Other

File:	T122.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Building Type ID
LABEL▲	C	5	Model Building Type Label
STRUCT_S▲	N	9,1	Slight Structural Damage State
STRUCT_M▲	N	9,1	Moderate Structural Damage State
STRUCT_E▲	N	9,1	Extensive Structural Damage State
STRUCT_C▲	N	9,1	Complete Structural Damage State
NONSTRUC_S▲	N	9,1	Slight Nonstructural Damage State
NONSTRUC_M▲	N	9,1	Moderate Nonstructural Damage State
NONSTRUC_E▲	N	9,1	Extensive Nonstructural Damage State
NONSTRUC_C▲	N	9,1	Complete Nonstructural Damage State

◆ **Debris Generated for Reinforced Concrete and Steel**

File:	T123.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Building Type ID
LABEL▲	C	5	Model Building Type Label
STRUCT_S▲	N	9,1	Slight Structural Damage State
STRUCT_M▲	N	9,1	Moderate Structural Damage State
STRUCT_E▲	N	9,1	Extensive Structural Damage State
STRUCT_C▲	N	9,1	Complete Structural Damage State
NONSTRUC_S▲	N	9,1	Slight Nonstructural Damage State
NONSTRUC_M▲	N	9,1	Moderate Nonstructural Damage State
NONSTRUC_E▲	N	9,1	Extensive Nonstructural Damage State
NONSTRUC_C▲	N	9,1	Complete Nonstructural Damage State

◆ **Unit Weights for Brick, Wood, and Other Elements**

File:	T121A.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Building Type ID
LABEL▲	C	5	Model Building Type Label
STRUCTURAL ▲	N	8,1	Unit Weight for Structural Elements
NONSTRUCT▲	N	8,1	Unit Weight for Nonstructural Elements

◆ **Unit Weights for Reinforced Concrete and Steel Elements**

File:	T121B.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Building Type ID
LABEL▲	C	5	Model Building Type Label
STRUCTURAL ▲	N	8,1	Unit Weight for Structural Elements
NONSTRUCT▲	N	8,1	Unit Weight for Nonstructural Elements

E.3.3.6 Casualties Parameters Module

◆ Casualty Default

File:	CASLTY.DBF
Mappable:	No

Name	Type	Length	Description
DESCRIPT▲	C	20	Time Description
VALUE▲	N	6,2	Commuting Distribution Ratio
INI_ENTRY ▲	C	10	Variable Name CdfDay = Commuting Distribution Factor at Day Time CdfNight = Night Commuting Distribution actor at Night Time CdfComm = Commuting Distribution Factor at Peak Commuting Time

◆ **Casualty Rates**

Casualties Rate Due to Buildings Damage

There are 5 files for each level of structural damage: slight, moderate, extensive, complete with no collapse, and complete with collapse.

File: T133A.DBF for slight
 T134A.DBF for moderate
 T135A.DBF for extensive
 T136A.DBF for complete with no collapse
 T137A.DBF for complete with collapse

Mappable: No

Name	Type	Length	Description
NO▲	N	2,0	Building type ID
BUILDING▲	C	5	Building structural type
LEVEL_1▲	N	9,4	Injuries per 1,000 people requiring basic medical aid without requiring hospitalization
LEVEL_2▲	N	9,4	Injuries (per 1,000) requiring a greater degree of medical care and hospitalization, but not expected to progress to a life threatening status
LEVEL_3▲	N	9,4	Injuries (per 1,000 people) which pose an immediate life threatening condition if not treated adequately and expeditiously. The majority of these injuries is a result of structural collapse and subsequent collapse or impairment of the occupants.
LEVEL_4▲	N	9,4	Instantaneously killed or mortally injured (per 1,000 people)

Casualties Rate Due to Bridges Damage

There are 5 files for each level of structural damage: slight, moderate, extensive, complete with no collapse, and complete with collapse.

File: T133B.DBF for slight
T134B.DBF for moderate
T135B.DBF for extensive
T136B.DBF for complete with no collapse
T137B.DBF for complete with collapse

Mappable: No

Name	Type	Length	Description
NO▲	N	2,0	Bridge class ID
LABEL▲	C	5	Bridge class
LEVEL_1▲	N	9,4	Injuries per 1,000 people requiring basic medical aid without requiring hospitalization
LEVEL_2▲	N	9,4	Injuries (per 1,000) requiring a greater degree of medical care and hospitalization, but not expected to progress to a life threatening status
LEVEL_3▲	N	9,4	Injuries (per 1,000 people) which pose an immediate life threatening condition if not treated adequately and expeditiously. The majority of these injuries is a result of structural collapse and subsequent collapse or impairment of the occupants.
LEVEL_4▲	N	9,4	Instantaneously killed or mortally injured (per 1,000 people)

◆ **Collapse Rates**

Collapse Rate Due to Complete Structural Damage

File:	T138A.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Building type ID
BUILDING▲	C	5	Building type
P_COL_CP▲	N	5,1	Probability of Collapse Given a Complete Damage State
P_ET_COL▲	N	5,1	Probability of Collapse Given Collapse
ENTRAP▲	N	5,1	Collapse Rate

Collapse Rate Due Complete Bridges Damage

File:	T138B.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Bridges class ID
BUILDING▲	C	5	Bridge class
P_COL_CP▲	N	5,1	Probability of Collapse Given a Complete Damage State
P_ET_COL▲	N	5,1	Probability of Collapse
ENTRAP▲	N	5,1	Collapse Rate

E.3.3.7 Shelter Module Databases

◆ Utility Factor

Note that the utilities factors probabilities is a default number that is picked by the software and could be changed by the user if necessary.

Shelter Category Weighting Factors

File:	T142.DBF
Mappable:	No

Name	Type	Length	Description
CLASS▲	C	5	IW, EW, OW and AW
DESCRIPT ▲	C	26	IW = Income Weighting Factor EW = Ethnic Weighting Factor OW = Ownership Weighting Factor AW = Age Weighting Factor
VALUE▲	N	6,2	Category Default Weight

◆ **Shelter Relative Modification Factors**

Income

File:	T143A.DBF
Mappable:	No

Name	Type	Length	Description
CLASS▲	C	5	Income Identification Label
DESCRIPT ▲	C	35	Varies by Class label
VALUE▲	N	6,2	Relative Default Modification Factor

Ethnicity

File:	T143B.DBF
Mappable:	No

Name	Type	Length	Description
CLASS▲	C	5	Ethnic Identification Label
DESCRIPT ▲	C	15	Varies by Class label
VALUE▲	N	6,2	Relative Default Modification Factor

Ownership

File:	T143C.DBF
Mappable:	No

Name	Type	Length	Description
CLASS▲	C	5	Ownership Identification Label
DESCRIPT ▲	C	18	Varies by Class label
VALUE▲	N	6,2	Relative Default Modification Factor

Age

File:	T143D.DBF
Mappable:	No

Name	Type	Length	Description
CLASS▲	C	5	Age Identification Label
DESCRIPT ▲	C	38	Varies by Class label
VALUE▲	N	6,2	Relative Default Modification Factor

◆ **Shelter Damage State Probabilities**

File:	T141.DBF
Mappable:	No

Name	Type	Length	Description
WEIGHT_FAC ▲	C	4	Weight factor
VALUE▲	N	6,2	Value of the Damage State Probability

E.3.3.8 Direct Economic Loss Module Databases

◆ Buildings

Building Loss Data

Structural Repairs Cost

There are 4 files for each damage state: complete, extensive, moderate, and slight.

File: T152A.DBF for complete
T152B.DBF for extensive
T152C.DBF for moderate
T152D.DBF for slight

Mappable: No

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
LABEL▲	C	5	Occupancy Type Label
W1▲	N	9,1	Repair Cost for Class W1
W2▲	N	9,1	Repair Cost for Class W2
S1▲	N	9,1	Repair Cost for Class S1
S2▲	N	9,1	Repair Cost for Class S2
S3▲	N	9,1	Repair Cost for Class S3
S4▲	N	9,1	Repair Cost for Class S4
S5▲	N	9,1	Repair Cost for Class S5
C1▲	N	9,1	Repair Cost for Class C1
C2▲	N	9,1	Repair Cost for Class C2
C3▲	N	9,1	Repair Cost for Class C3
PC1▲	N	9,1	Repair Cost for Class PC1
PC2▲	N	9,1	Repair Cost for Class PC2
RM1▲	N	9,1	Repair Cost for Class RM1
RM2▲	N	9,1	Repair Cost for Class RM2
URM▲	N	9,1	Repair Cost for Class URM
MH▲	N	9,1	Repair Cost for Class MH

Repairs Costs for Acceleration-Sensitive Non-Structural Elements

File:	T153.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
LABEL▲	C	5	Occupancy Type Label
SLIGHT▲	N	9,1	Repair Cost for Slight Nonstructural Damage State
MODERATE ▲	N	9,1	Repair Cost for Moderate Nonstructural Damage State
EXTENSIVE ▲	N	9,1	Repair Cost for Extensive Nonstructural Damage State
COMPLETE▲	N	9,1	Repair Cost for Complete Nonstructural Damage State

Repairs Costs for Drift-Sensitive Non-Structural Elements

File:	T154.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
LABEL▲	C	5	Occupancy Type Label
SLIGHT▲	N	9,1	Repair Cost for Slight Nonstructural Damage State
MODERATE ▲	N	9,1	Repair Cost for Moderate Nonstructural Damage State
EXTENSIVE ▲	N	9,1	Repair Cost for Extensive Nonstructural Damage State
COMPLETE▲	N	9,1	Repair Cost for Complete Nonstructural Damage State

E-110*Cost Modifiers*

File:	T15A.DBF
Mappable:	No

Name	Type	Length	Description
CNTY_FIPS▲	C	2	County 5-digit FIPS code
COUNTY_NAM ▲	C	20	County Name
INDEX▲	N	5,1	Cost modifier index

Contents*Contents Value as Percentage of Replacement Value*

File:	T155.DBF
Mappable:	Yes

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
LABEL▲	C	5	Occupancy Type Label
VALUE ▲	N	4,0	Contents Value as Percentage of Replacement Value

Percent Content Damage

File:	T156.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
LABEL▲	C	5	Occupancy Type Label
SLIGHT▲	N	3,0	Percent Content Damage for Slight Nonstructural Damage State
MODERATE ▲	N	3,0	Percent Content Damage for Moderate Nonstructural Damage State
EXTENSIVE ▲	N	3,0	Percent Content Damage for Extensive Nonstructural Damage State
COMPLETE▲	N	3,0	Percent Content Damage for Complete Nonstructural Damage State

Business Inventory***Annual Gross Sales***

File:	T157.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
<i>LABEL</i> ▲	C	5	Occupancy Type Label
SALES▲	N	20,0	Annual Gross Sales or Production

E-114*Business Inventory as Percent of Gross Annual Sales*

File:	T158.DBF
Mappable:	No

Name	Type	Length	Description
NO [▲]	N	2,0	Identification ID
<i>LABEL</i> [▲]	C	5	Occupancy Type Label
INVENTORY [▲]	N	5,1	Business Inventory as Percentage of Annual Gross Sales

Percentage of Business Inventory Damage

File:	T159.DBF
Mappable:	Yes

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
<i>LABEL</i> ▲	C	5	Occupancy Type Label
SLIGHT▲	N	3,0	Percent Business Damage for Slight Nonstructural Damage State
MODERATE ▲	N	3,0	Percent Business Damage for Moderate Nonstructural Damage State
EXTENSIVE ▲	N	3,0	Percent Business Damage for Extensive Nonstructural Damage State
COMPLETE▲	N	3,0	Percent Business Damage for Complete Nonstructural Damage State

Repair Time***Building Cleanup and Repair Time - Construction***

File:	T1510.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
LABEL▲	C	5	Occupancy Type Label
NONE▲	N	9,1	Construction Time for None Structural Damage State
SLIGHT▲	N	9,1	Construction Time for Slight Structural Damage State
MODERATE ▲	N	9,1	Construction Time for Moderate Structural Damage State
EXTENSIVE ▲	N	9,1	Construction Time for Extensive Structural Damage State
COMPLETE▲	N	9,1	Construction Time for Complete Structural Damage State

Building Cleanup and Repair Time - Extended

File:	T1511.DBF
Mappable:	Yes

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
LABEL▲	C	5	Occupancy Type Label
NONE▲	N	9,0	Construction Time for None Structural Damage State (Days)
SLIGHT▲	N	9,0	Construction Time for Slight Structural Damage State (Days)
MODERATE▲	N	9,0	Construction Time for Moderate Structural Damage State (Days)
EXTENSIVE▲	N	9,0	Construction Time for Extensive Structural Damage State (Days)
COMPLETE▲	N	9,0	Construction Time for Complete Structural Damage State (Days)

Building and Service Interruption Multipliers

File:	T1512.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
LABEL▲	C	5	Occupancy Type Label
NONE▲	N	9,0	Construction Time Multiplier for None Structural Damage State
SLIGHT▲	N	9,0	Construction Time Multiplier for Slight Structural Damage State
MODERATE ▲	N	9,0	Construction Time Multiplier for Moderate Structural Damage State
EXTENSIVE ▲	N	9,0	Construction Time Multiplier for Extensive Structural Damage State
COMPLETE▲	N	9,0	Construction Time Multiplier for Complete Structural Damage State

Income Loss Data***Rental and Disruption Costs***

File:	T1513.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
<i>LABEL</i> ▲	C	5	Occupancy Type Label
RENTPERM▲	N	5,2	Rental Cost Per Month
RENTPERD▲	N	5,2	Rental Cost Per Day
DSRPTPERD ▲	N	5,2	Distribution Cost Per Month

Percent Owner Occupied Values

File:	T1514.DBF
Mappable:	Yes

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
LABEL▲	C	5	Occupancy Type Label
OWNER ▲	N	3,0	Percent Owner Occupied

Wages and Capital Related Income

File:	T1515.DBF
Mappable:	No

Name	Type	Length	Description
NO▲	N	2,0	Identification ID
LABEL▲	C	7	Occupancy Type Label
INCPERY▲	N	15,3	\$ Income Per Year
INCPERD▲	N	8,3	\$ Income Per Day
WAGEPERD▲		8,3	\$ Wages Per Day
EMPPERD▲		8,3	Employment Per Day
OUTPERD▲		8,3	\$ Industry Output per Day

Recapture Per Day

File:	RECAPF.DBF
Mappable:	No

Name	Type	Length	Description
OCCU▲	C	5	Occupancy Type Label
WAG_FAC▲	N	5,2	Wages Recapture (%)
EMP_FAC▲	N	5,2	Employment Recapture (%)
INC_FAC▲	N	5,2	Income Recapture (%)
OUT_FAC▲	N	5,2	Industry Output Recapture (%)

◆ **Military Installation**

Value Breakdown Ratios

File:	MIVALPCT.DBF
Mappable:	No

Name	Type	Length	Description
OCCUP▲	C	6	Occupancy Type Label
PCT_STR▲	N	3,0	Structural Elements Ratio
PCT_NSA ▲	N	3,0	Non-structural Element Ratio - Acceleration Sensitive
PCT_NSD ▲	N	3,0	Non-structural Element Ratio - Drift Sensitive

Damage to Loss Ratios Factors

File:	MILOSSR.DBF
Mappable:	No

Name	Type	Length	Description
OCCUP ▲	C	6	Occupancy Type Label
STR_S▲	N	3,0	Factor For Structural Element With Slight Damage State
STR_M▲	N	3,0	Factor For Structural Element With Moderate Damage State
STR_E▲	N	3,0	Factor For Structural Element With Extensive Damage State
STR_C▲	N	3,0	Factor For Structural Element With Complete Damage State
NSA_S▲	N	3,0	Factor For Non-Structural (Acceleration Sensitive) Element With Slight Damage State
NSA_M ▲	N	3,0	Factor For Non-Structural (Acceleration Sensitive) Element With Moderate Damage State
NSA_E▲	N	3,0	Factor For Non-Structural (Acceleration Sensitive) Element With Extensive Damage State
NSA_C▲	N	3,0	Factor For Non-Structural (Acceleration Sensitive) Element With Complete Damage State
NSD_S▲	N	3,0	Factor For Non-Structural (Drift Sensitive) Element With Slight Damage State
NSD_M ▲	N	3,0	Factor For Non-Structural (Drift Sensitive) Element With Moderate Damage State
NSD_E▲	N	3,0	Factor For Non-Structural (Drift Sensitive) Element With Extensive Damage State
NSD_C▲	N	3,0	Factor For Non-Structural (Drift Sensitive) Element With Complete Damage State
CNT_S▲	N	3,0	Factor For Contents With Slight Damage State
CNT_M ▲	N	3,0	Factor For Contents With Moderate Damage State
CNT_E▲	N	3,0	Factor For Contents With Extensive Damage State
CNT_C▲	N	3,0	Factor For Contents With Complete Damage State

◆ **Lifelines**

Replacement Cost

File:	T1516.DBF
Mappable:	No

Name	Type	Length	Description
<i>LABEL</i>▲	C	5	Transportation System Label
VALUE▲	N	12,0	Replacement Value
PER▲	C	2	Units
DESCRIPT ▲	C	55	Transportation System Component Classification

Transportation Systems Damage Ratio

File: DRxx.DBF where xx is:

= HW for highways
 = RW for railways
 = LR for light rail
 = BS for bus
 = PH for port & harbor
 = FS for ferry
 = AT for airport

Mappable: No

Name	Type	Length	Description
NO▲	N	2,0	Identifier
<i>LABEL</i> ▲	C	5	Transportation System Classification Label
DAMAGE_S▲	N	7,2	Damage Ratio for Slight Damage State
DAMAGE_M▲	N	7,2	Damage Ratio for Moderate Damage State
DAMAGE_E▲	N	7,2	Damage Ratio for Extensive Damage State
DAMAGE_C▲	N	7,2	Damage Ratio for Complete Damage State

Utility Systems Damage Ratios

File: DRxx.DBF where xx is:

= PW for potable water
 = WW for waste water
 = OS for oil system
 = NG for natural gas
 = EP for electric power
 = CM for communication

Mappable: No

Name	Type	Length	Description
NO▲	N	2,0	Identifier
<i>LABEL</i> ▲	C	5	Utility System Classification Label
DAMAGE_S▲	N	7,2	Damage Ratio for Slight Damage State
DAMAGE_M▲	N	7,2	Damage Ratio for Moderate Damage State
DAMAGE_E▲	N	7,2	Damage Ratio for Extensive Damage State
DAMAGE_C▲	N	7,2	Damage Ratio for Complete Damage State

E.3.3.9 Indirect Economic Loss Module Databases**◆ Analysis Factors**

File: IMPLANDEF.IMP

Mappable: No

Name	Type	Length	Description
IND_CODE	C	6	Industry Code
S_IMPORTS	N	6.2	Supplemental Imports
SUPPLIES	N	6.2	supplies Inventories
DEMANDS	N	6.2	Demands Inventories
N_EXPORTS	N	6.2	New Export Markets
OTHER_EXP	N	6.2	Other Expenses

◆ **Restoration and Rebuilding**

File:	INDECRF.DBF
Mappable:	No

Name	Type	Length	Description
SECTOR	C	5	Economic Sector
YEAR1	N	5,1	% Restored after 1 Year
YEAR2	N	5,1	% Restored after 2 Year
YEAR3	N	5,1	% Restored after 3 Year
YEAR4	N	5,1	% Restored after 4 Year
YEAR5	N	5,1	% Restored after 5 Year

◆ Stimulus Effect

File:	INDECSTM
Mappable:	No

Name	Type	Length	Description
YEAR	C	1	Year Number
SECTOR	C	4	Economic Sector
VALUE	N	10,1	Total Stimulus Value